

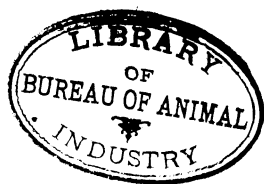
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HUNTER-HORSE PRODUCTION IN IRELAND.

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INTRODUCTION.

Notwithstanding the marvelous advances which have been made from time to time through the aid of science and genius in perfecting and adapting steam and electrical appliances to the purposes of locomotion, the horse still occupies a place of the utmost importance. The hunter or riding horse is always in demand, whether in time of war or in peace. The success of a nation is largely determined by her military strength, and recent events have shown that success in war may depend as much on military remounts as on any other factor.

At the request of the Secretary of Agriculture the writer made a careful study of the methods employed by Irish farmers in producing the type of hunter horse for which Ireland is so justly noted in all parts of the civilized world. This was done in the hope of securing and systematizing information pertaining to the breeding of these horses which would be of assistance to the American farmer. Although some attention has already been given to this industry in the United States, the work could be carried on, in the opinion of many people, on a much more extensive scale, both to the financial advantage of farmers and to the strength and prestige of the Army. Few countries possess better natural advantages than our own, either in soil or climatic conditions, for breeding this class of horses. The Eastern and Western States have natural advantages which are especially favorable. Their conditions are very similar to those in the most highly favored breeding districts of Ireland. Many authorities believe that the factors which have given the Irish hunter horse his prestige are the environments within which he is reared—namely, abundance of outdoor air and exercise and the limestone pastures on which he grazes the greater portion of the year.

The question at once suggests itself, Is the demand for this class of horses sufficient to justify American farmers in engaging in its production? This depends almost solely on the quality of the animal produced. If good care and judgment are used in the selection of

suitable sires and the proper mating of the mares, so that animals of excellent quality are bred, the progeny, if well trained, would meet with ready sale at highly remunerative prices. On the contrary, if haphazard methods of breeding are practiced, the results will certainly be most unsatisfactory and disappointing. There always has been a good demand for high-class riding horses at home, and this demand is on the increase. However, the supply is obtained by picking up promising animals over the country and not by systematic breeding. In addition to the home demand there would gradually develop a profitable export trade to Great Britain and continental Europe. Recent investigations by the writer in all of those countries have shown conclusively that there is a strong and rapidly increasing demand for this type of horses at highly remunerative prices. In England they are wanted by the higher classes of people for hunting and riding, while several of the Continental countries are annually importing large numbers. Aside from this demand, all of these countries annually import thousands of such horses, at prices which would be profitable to our eastern and western farmers, to supply the needs of their army remount systems. Although Ireland is the most highly favored breeding ground for such horses at present, there is reason to believe that the United States could, at an early date, secure her share of the trade. While it may not be very generally known, it is true, nevertheless, that American-bred horses are annually imported into Ireland, and after several months training on Irish soil are sold at handsome profits to England and other countries—not always as American-bred, but very often as Irish hunter horses. Some of these American-bred horses have won many of the best prizes for hunter horses in the leading English shows, including the Hunter horse show. The writer is also informed that only a few years ago an exhibitor from the west of Ireland exhibited, under an Irish name and breeding, at the Royal Dublin Society's Horse Show—the greatest hunter-horse show in the world—an American-bred horse which not only won the first premium in his class, but also the champion cup for the best hunter horse in the entire show. At this show there were about 1,000 entries, which included the cream of the country. What better evidence could be desired of our possibilities in the production of this class of horse?

Much of the failure in this line of horse breeding in Ireland is due to a factor which is not nearly so prevalent in the United States, namely, small tenant farmers, who are almost poverty stricken on account of high rents and other conditions. No person who has not visited these districts can form a fair conception of the large percentage which exists of this class of people and their influence on any industry. These poor people are more or less engaged in the

production of horses, and to them the only commendable feature of a sire is the smallness of the fee for which his service can be secured. Where such methods or lack of methods in breeding are continually practiced there will always be a great many useless animals, which must be termed misfits so far as hunter horses are concerned. While the production of high-class hunter horses, like that of any other high-class horse, is by no means a certainty, nevertheless, when the breeding is conducted in a systematic manner the results will certainly be more favorable than the casual observer of Irish horse breeding might consider them to be from general impressions obtained by a hurried visit in the country. This conclusion is amply justified by the results obtained by men who have followed system and used judgment in the work.

It is a lamentable fact that the Irish people did not many years ago appreciate as they do to-day the need of some form of registry association, where animals conforming to the desired type might have been entered as foundation stock to afford breeders and farmers an opportunity to breed and develop horses in a consistent and systematic manner. While they have a truly recognized type of what a hunter horse ought to be, in the majority of instances this horse could not resemble either parent and be true of his type. He is often the result of chance—the progeny of a large sire and a small mare, and *vice versa*. It is impossible to secure uniformity of type when such methods are practiced. No people appreciate this more fully than the better class of Irish breeders and farmers. For some time methods have been under consideration for the purpose of removing this difficulty. The excellent work now being undertaken by the department of agriculture in the registration of suitable sires and the nomination of desirable mares, so that they may be bred free of charge, or almost so, to sires of the desired type and conformation, will have an influence which will be far-reaching and will in time be the basis of a new and systematic era in horse production in Ireland.

IMPORTANCE OF THE HORSE INDUSTRY OF IRELAND.

Ireland, in a large degree, is dependent upon her agricultural resources. This being true, we would naturally expect her people to engage in those branches of work which are most likely to defy foreign competition in the markets of the world. As a result, we find that live-stock husbandry, in some of its numerous lines, occupies the principal place in the farming operations. While the production of meat animals, such as beef cattle, sheep, and bacon hogs, and dairy farming have always been prominent features in all sections, yet the most important branch of the live-stock industry of Ireland, when compared with that of other countries, is the production of horses.

Not that horse production is any more profitable to the farmers of Ireland than the other classes of live stock mentioned, but that in some way or other the merits of the Irish horse have for generations stood out preeminently in certain lines above those of similar classes of horses produced in almost any other country. This is especially true of the Irish hunter horse. Ireland might quite properly be described as a grass country. More than 80 per cent of her entire area is under grass or meadow, and more than 60 per cent of her area is devoted to permanent grass land. With such conditions prevailing, we can at once appreciate the importance of the live-stock industry. Then, too, when we consider that the rainfall is heavy and very uniformly distributed throughout the year, we can appreciate more fully the importance of the grass crop. In no other country have I seen anything which approaches Ireland in grass production. My visit there was during the latter part of August and September, the season of the year when we would expect to find a shortage, but such was not the case. Another factor which, in the estimation of many people, renders the country especially well adapted to the production of horses is that throughout the greater part there exists a limestone soil. This soil is thought to produce a grass containing a high percentage of those mineral elements which are instrumental in producing a hard, flinty bone which is so much desired in the horse. This is a natural advantage which aids materially in the production of a first-class horse. Countries which are not so favored from a natural standpoint will find this a handicap in competing with the Irish farmer in the production of breeding animals.

The climate, too, is decidedly favorable for the production of any class of animals. It is very uniform and temperate throughout the year. During the summer, while at certain times the weather is warm, it is at no time unbearable or of such intensity as seriously to interfere with the comfort of animals. Mild weather also prevails during the winter season; thus animals of all classes graze more or less during each of the twelve months of the year. This is a wonderful advantage in that it lessens the cost of keep, and at the same time allows the young animals plenty of freedom, pure air, and nature's ration, all of which are so beneficial in the proper development of any class of animals. Blessed with so many natural advantages, the Irish people as a class make full use of them; that is, they are not soil tillers, but believe in letting nature not only produce the feed for the animals, but also cure it and furnish the feeding grounds.

In the majority of instances on Irish farms, the easiest way is the best method of accomplishing the desired end. For centuries the Irish people have been fond admirers of sport. This accounts in a large measure for the Irishman's preference for the horse over any

other animal. It is also responsible for the existence and development of a racing horse. Perhaps under more favorable natural surface conditions of the land they might have devoted their attention to the breeding and development of a trotting horse, but for a rather rough and broken country the saddle horse was better adapted and given the preference.

While horse breeding is carried on in all parts of the country, certain districts, on account of natural advantages or the inclinations of the people, are more largely devoted to this branch of work. There is also more or less diversity of type in the animals produced. Those who are in a position best to know the prevailing conditions and those which formerly existed claim that it was largely during the last quarter of the nineteenth century that this diversity of blood, which has resulted in a mixture of types, was introduced into the country; that previous to that time the horse-breeding industry was more largely confined to the production of one or two types, which answered admirably the needs of the home people and commanded the attention of foreign buyers.

Eminent authorities on Irish horse breeding claim that for centuries there existed two types of horses which possessed wonderful merit and were noted throughout Ireland, Great Britain, and continental Europe for their endurance and usefulness, namely, the "Irish horse" and the "Hunter horse," the latter being the progeny of the Irish mare and the Thoroughbred sire. One authority describes the "Old Irish mare" as "small, clean-legged, and very hardy." In discussing this class of horses, he says:

This breed originated in the numerous Spanish stallions brought to Ireland in the fifteenth century. There was a regular trade between the south and west of Ireland and Spain for many centuries; Ireland exporting wool, hides, and butter, and receiving in return wine, cloth, horses, and specie. This class of Spanish horses introduced was the Andalusian Barb. To this element may be attributed the extraordinary endurance of the Irish hunter of the present time. The outward and apparent influence of Spanish blood can at present be recognized only in the Connemara pony.^a

This quotation was taken from the report of a special commission appointed by the Government, in 1896, to inquire into the horse-breeding industry of Ireland. Mention is made of this "Old Irish horse" because it is claimed to be the foundation stock, on the dam's side, from which the famous Irish hunter horse originated. Some farmers, even at the present time, advance claims of having mares descended from this famous stock. It is more than probable that the majority of these modern Irish mares are the result of the mating of a hardy dam with some high-grade sire, being the result of accidental rather than careful breeding.

^a For description of the Connemara pony, see page 201.

In considering the present status of the Irish horse industry the country may be divided into five districts, namely, the northern, western (including the "congested districts"), southern, eastern, and central districts. The northern district is devoted largely to the breeding of draft horses, harness horses, and the fattening of horses purchased in all parts of the country for the market. In the western part, in the "congested districts," the attention of the people has been largely confined, on account of the barrenness of the country, to the breeding of ponies, but in recent years considerable Hackney blood has been introduced for crossing.

The southern, eastern, and central portions of the country are the principal breeding ground of the hunter and racing horse. In all of these districts there is more or less of a tendency to breed other than the types mentioned, but it is of a very secondary nature. It is impossible to secure any reliable statistics relating to the numbers of each type of horse in the country. Instead of classifying them by breeds or types, a procedure which would be well-nigh impossible, they are classified according to age, so far as the mature or immature animals are concerned. But in the agricultural statistics of Ireland is to be found, for the year 1903, a carefully revised list of the stallions owned and used for breeding purposes. This gives a useful and instructive division of these sires, so far as the breed and district location of each are concerned. According to these statistics there were, in the year 1903, in all, 2,460 stallions used for breeding purposes. Of this number 662 were Thoroughbreds, 561 half-breeds,^a 491 agricultural sires,^b 371 Clydesdales, 116 Hackneys, 113 Shires, and 146 of all other breeds. A study of these figures will show that practically 50 per cent of all the sires used belong to the first two classes, which are used for the purpose of producing race and hunter horses. About one-fifth, or 20 per cent, of the entire number belong to the so-called "agricultural" class of horse. These horses are very popular with the farmers, as they possess sufficient weight to till the soil, and the mares, when crossed with good Thoroughbred sires, oftentimes in the first, second, and third crosses, produce high-class hunters. In fact, if it were not for this class of horses, the Irish farmers would long ago have been obliged either to give up hunter-horse production or to follow the work with more system.

Of the draft breeds the Clydesdale is the most popular. During the last two decades a considerable number of Hackney stallions have

^a By the term "half-breds," is meant all so-called "Thoroughbreds" not entered in Weatherby's Studbook, hunter sires, and animals possessing one or more Thoroughbred crosses, but not eligible for registration.

^b By the term "agricultural sires" is meant those horses of mixed breeding which possess sufficient size to warrant their use in the production of the so-called "general purpose" farm horse.

been imported from England. This has been done for the purpose of breeding a high-class harness horse in certain parts of the country. The scheme, while fostered by the Government, has met and is still having to contend with vigorous opposition from those interested in the production of hunter and saddle horses. They claim that there is no need of introducing any foreign blood for the purpose of producing a harness horse, as from the use of Thoroughbred and hunter sires there will always be a large number of animals well suited to harness purposes; that the Hackney blood will be distributed over the various districts and in time will seriously injure the hunter-horse breeding industry, as in their opinion the Hackney, while nice to look at, does not possess sufficient endurance, a feature for which the Irish horse is noted. This is a bitter question among horsemen at present, but that harness horses of high quality can oftentimes be produced from Thoroughbred and hunter sires the writer is convinced. While in Ireland he inspected many harness horses bred in this way. Perhaps these horses do not, as a rule, possess as high action as animals sired by coach horses, but there is one thing very evident, and that is that they have a long, true stride, which renders it no task for them to cover distances in a manner which is seldom found in the high-acting horse.

The main object in Irish horse breeding, to all appearances, is to produce the type or types of horses which will attract the foreign buyer. While the home trade is important, it is of a very secondary nature when compared with the export demands. This latter trade has been growing steadily for more than a century, till at the present time it means an income of many millions of dollars annually to the country. The principal business is in hunter and saddle horses. In addition to this trade, there is also a demand for draft, harness, and remount horses. This latter class and a considerable number of the harness type are animals from Thoroughbred or hunter sires, which, on account of some deficiency, are not suitable as hunter horses.

THE HUNTER HORSE.

Before discussing the various methods practiced by Irish farmers in producing hunter horses, it is deemed advisable to describe, as nearly as possible, what constitutes a high-class hunter horse.

This type of horse derived its name from the purpose for which it was formerly almost solely used, namely, hunting. For centuries in Great Britain and Ireland it has been the prevailing custom among the nobility and the more wealthy classes of the people to organize "hunts" at certain seasons of the year. These hunts vary somewhat in their nature, but generally have for their object the capture of a fox or stag. Sometimes, however, "drag hunting" is resorted to, but as

this feature has no other prize than the pleasure of a ride across a path of country, laid out for the purpose, it is seldom indulged in, except when other hunts are impossible. A noted authority in discussing this latter method of hunting in Baily's Hunting Directory for 1899-1900 says:

Drag hunting is, of course, only excusable in a country where there is no animal suitable to hunt, or where the country is so cut up by wire, market gardens, railroads, canals, and other obstacles that any but a selected line is out of the question. To those who live in such a country, the drag affords a legitimate excuse for a gallop over fences. Those who hunt to ride rather than ride to hunt find that it has many very great advantages.

The above quotation sums up the whole question of hunting as practiced in the countries mentioned. The main object of the hunt is to secure as much riding as possible, anywhere and everywhere over the country, and the most successful hunts are those which require the greatest amount of riding and time before the victim of the hunt is captured. These hunts are most highly appreciated when the fox or stag selects the route having the greatest number of difficult fences, hedges, ditches, mounds, and other obstacles. This being true, we can appreciate, in a measure at least, the importance of the rider's, especially should he weigh 210 pounds, having a horse capable of enduring feats and trials unknown in any other kind of work to which horses are subjected. While there is always much pleasure to be derived from a ride across such paths, yet the true sportsman is not contented to be bringing up the rear of such a procession. The desire of all those who participate in such sport is to have horses which will carry them always to the very front. Thus the demand for a riding horse of such conformation and breeding as to render him able to carry a heavy-weight rider at a very high rate of speed over all kinds of soil, fences, ditches, and such other obstacles as might present themselves in the course has resulted in the production of the type of horse commonly designated as the "heavy-weight," or "weight-carrying," hunter.

That such a type of horse is hard to produce with any degree of certainty is not at all difficult to understand. He is a combination animal. Speed alone does not make a hunter horse; neither does the ability to carry heavy weights qualify a horse for this class. He must be able to carry a heavy weight at a high rate of speed for a long time over any kind of ground or obstacle. A horse lacking in any one of these requisites can not be considered a first-class heavy-weight hunter. Breeders who have failed to keep all the above-mentioned points in mind have never met with any degree of success in producing this class of horses. Some people fail to appreciate the fact that there is any difference whatever between a high-class saddle horse and a hunter horse. They claim that the saddle horse, provid-

ing he is a good jumper, is suitable for hunting purposes. This is an erroneous idea. While a good hunter may also be a good saddle, or riding, horse—in fact, if well broken, he is always such—the opposite is seldom true. This is due to the fact that but very few saddle, or riding, horses possess bone and constitution sufficient to endure the hardships to which the hunter is subjected. Thus in the ordinary methods of breeding, as practiced, it is the exception to find a horse with sufficient substance to make a good hunter. The opposite is usually true in the production of hunter horses, as the majority of those produced are much better suited to fill the demands of the saddle or riding horse than those of the hunter type.

While horses have been bred more or less in many countries to meet this demand, Ireland has been more successful in this direction than any other country. The Irish hunter horse has the reputation of being able to withstand the severity of the work better than those bred in any other land. Thus a description of the Irish hunter horse, as seen on his native soil, should be an aid to those interested in the production of the hunter horse. For centuries these animals have been bred in Ireland; hence the more intelligent class of farmers and breeders are well versed as to what constitutes the highest type of weight-carrying hunter. In obtaining a detailed description of the hunter horse, in addition to a close study of a large number of the best specimens, the writer consulted freely with the best breeders and judges, so that a careful and accurate idea of the essential points might be obtained.

At all the leading horse shows there are at least three distinct types of hunters recognized, namely, "heavy," "medium," and "light-weight" animals. These terms of weight have reference to the weight of the rider which the animal in question is capable of carrying, not to the number of pounds which the animal itself will weigh. The latter point is no criterion of the strength of an animal, as that is determined by certain points in the conformation. The term "heavy-weight hunter" is usually applied to an animal whose conformation is such as to render it able to carry a rider of at least 210 pounds' weight over all kinds of ground and obstacles at a good fast gallop for several hours; "medium-weight hunters" are required to carry from 182 up to 210 pounds' weight; while "light-weight hunters" must be able to carry at least 168 pounds over the courses.^a While the differences in the weights may not appear to be very great, nevertheless they are. When an animal is forced to do its utmost

^a The classes for American hunters are considerably lighter. At the national horse show at Madison Square Garden, New York, heavy-weight hunters are those up to carrying 190 pounds; medium weights, those up to carrying 165 to 190 pounds, and light weights, those up to carrying 165 pounds.

for a considerable period of time, every additional pound makes a marked difference. The medium-weight hunter might, under the most favorable conditions, carry a heavier weight, but should it be forced to meet unfavorable conditions, the life of both the horse and the rider would be endangered. For this reason, hunting men always prefer a horse capable of doing more than will be expected of him in the majority of chases. As a result, the demand for heavy-weight hunters always exceeds the supply, and it is the last 10 or 20 pounds which a horse is capable of carrying which enhances his value materially on the market. In discussing the advantage of weight in selling the draft horse, it has often been asserted that each additional pound of flesh which a horse carries, after the 1,600-pound mark is reached, is worth 25 cents up to 1,800 pounds, and each additional pound thereafter is worth 50 cents, providing that the other essential points of the horse are present. If we were to make a somewhat similar assertion concerning the influence which increased ability to carry weight had on the market value of a hunter horse, it would be approximately as follows: Taking 168 pounds as our limit, each additional 14 pounds up to 196 would readily command \$100, while every additional 14 pounds after the 196-pound mark is reached would easily enhance the value of the horse by at least \$200; providing, of course, that all the other essential points which go to constitute a high-class hunter were also present.

Thus we can readily appreciate the importance of aiming to produce the very highest type of hunter horse. In submitting the following points to be observed in the production of a high-class heavy-weight hunter horse, the writer includes a full description of all the parts of a horse, many of which are not unlike those present in a high-class horse of any other type:

Head.—The ears should be fine, not too long, approaching each other at the tips when thrown forward, and not too wide set at the base. Ears which are wide apart at the base are never carried well and disfigure the head very much. The forehead should be flat and wide between the eyes, indicating intelligence and a good disposition—two very great requisites in the hunter horse.

The eyes should be wide apart, prominent and bold in expression, indicating vigor and stamina. The nasal bones should be straight in front, slightly dished on the sides, giving a clean-cut appearance.

An important point to be observed is the nostrils, which should be firm, large, and flexible, so as to insure plenty of lung capacity. The lips should be held up firmly; mouth of medium size; muzzle neat, and branches of the lower jaw well spread apart at their angles so as to allow sufficient freedom for the windpipe.

Neck.—Clean-cut, medium length, very muscular, head well attached in a graceful angular manner; the jugular gutter must be well developed and the neck must blend smoothly into the shoulders and back.

Withers.—This part should be well developed, of medium height, and blend nicely with the shoulders and back.

Shoulders.—Long and sloping, so as to allow free and easy action. The sides of the blades must be well covered with muscle.

Chest or girth.—This is one of the most vital points to be considered in this class of horses. It is here that he gets his staying power, which is so essential in a long trial. Depth of chest accompanied by fair width can not be too strongly emphasized. Many a horse that would otherwise be classed as a good hunter is rejected on account of a slight slackness in his chest, due to lack of depth and width. Good authorities claim that the girth measure of a horse in hunting condition should be better than 6 feet.

Arms.—The arms should be thrown well forward, so as to give sloping shoulders which blend snugly with the back.

Forelegs.—We have now come to one of the most vital points in the make-up of the hunter horse. The forelegs are usually the first part of the mechanism to show weakness as the result of continued hard work. That portion between the elbow and the knee, called the forearm, should be fairly long, well developed, and very strong; well covered with hard, well-developed muscles, with grooves of demarcation between, so that each individual muscle stands out prominently. The knees should be clean cut, large from side to side and from the front portion backward, and strong in all directions; the bone forming the back part should be somewhat prominent. The cannon should be short, broad in front, flat viewed from the side, and clean in all its parts; the tendons should stand out plainly and be of a hard, cordlike appearance. The lines of demarcation between the tendon and ligament and bone should be well defined. These parts must be well supported below the knee, having from $8\frac{1}{4}$ to 9 inches of bone, so as to avoid the slightest tendency toward weakness. The fetlock must be strong and well supported in all directions. The conformation of the pasterns is another important point; they must be of medium length and fairly sloping, so as to prevent any inclination toward a stubby, stilted gait, which is so hard on both the horse and the rider; but strength of pastern is indispensable and must not be sacrificed to slope. The feet of a good hunter are rather smaller in proportion than in some other types of horses, but they should be round, strong, and fairly deep in the wall. The sole should be concave, frog well developed; heels full, wide, and not too deep; toes in a straight line, turning neither in nor out while standing, as the feet should move in a straight line.

Body.—Viewing the hunter horse from the side one will at once be impressed with his depth of rib, shortness of topline, and length of underline. The back should be short, strong, and straight. Any inclination toward hollowness, or swaying of the back, is a most serious objection. The loin should be broad and well padded with firm muscles. The flank must be well let down, as nearly as possible in a line with the lower part of the body. A light flank is considered as indicative of poor staying powers.

Hind quarters.—The croup should be well muscled and carried out straight to the tail, which should be full-haired. An examination of a number of the best hunters at the recent horse show of the Royal Dublin Society revealed a slight inclination toward drooping from the hip points to the tail head, but it is very probable that these champion animals would have been deemed more nearly perfect had their croups been more nearly straight instead of having the slight tendency to droop. The thighs, quarters, and lower thighs, or gaskins, should be heavily muscled. Size and strength of the hocks are all-important, seeing that they are fulcrums upon which the whole power of the hind legs, and often the entire weight of horse and rider, depend. Too much stress can not be laid on the size and true formation of these important joints, for no matter how

well a horse may be formed otherwise, a pair of weak hocks will spoil the whole structure and have a tendency to lead to the development of disease. The hocks should be deep and strong in all directions, having all points well developed, but not rough. They must be free from malformations or puffiness; the joint should be well developed, straight on its back surface, and the whole joint clean, hard, and of an angular appearance. The cannons should be short and wider and flatter than in front; tendons well marked and the individual ones standing out conspicuously. There must not be any inclination toward a pinched appearance below the hock joint in front, and the cannon should gradually taper in width from before backward and from the hock to the fetlock joint. The fetlock joint should be large, clean-cut, and strong; while the pasterns should be of medium length, sloping, and strong.

The hind feet are smaller and not so round as the front feet, but the sole should be more concave; frog well developed; heel good width and not too deep. While dark color is preferable in the case either of fore or hind feet, white feet of good quality are not considered as being a very serious objection in an otherwise good horse.

Temperament.—Temperament is an important point in this particular class of horses. Viciousness or extreme nervousness can not be tolerated, as they not only endanger the life of the rider, but also that of other horses and riders in a hunt. A mild but energetic temperament is desired, and any deviation from such is objectionable. The skin and hair are points which add materially to the value of animals possessing good conformation. A soft, mellow, and loose skin is desirable; while the hair should be fine, silky, and straight; this applies also to the mane and tail when compared with other breeds.

Action.—The action should be prompt, free, and elastic; not too high knee and hock action, but going rather close to the ground, especially in the canter and gallop. Paddling, or rolling, of the front feet is a most serious objection, being not only ungainly to the eye, but very wasteful of energy. The hocks must be carried well together when moving, but not close enough below to cause interfering.

Color.—While this is largely a matter of preference, yet certain colors are very objectionable. This is especially true of all light colors, with the exception of grays. Light colors are called "soft colors," indicating that the animal possessing such lacks endurance. The most popular colors are dark brown, dark bays, and dark chestnuts. A gray horse possessing the requisites of conformation, while not so desirable as one of the colors mentioned, is very much preferred to light bays, light brown, or other light colors. The color of the legs is very important. Bay, red, or mealy colored legs are very sharply discriminated against, and although white legs are not objectionable, especially in chestnuts, whole colors are always given the preference.

Weight.—A peculiar and interesting feature of the work of all judges of hunters is that the weight of the animal is never considered; that is, in the discrimination between the different classes of hunter horses, the question of weight of an animal, a point so often considered in American horse judging, has no influence. The suitability or qualifications of an animal for some particular class are based on other points, such as the heart girth, strength of back, strength of hocks and knees, and the size of forearm, gaskin, cannons, and the amount of muscle present. These points, in the opinion of hunter judges, are much more reliable than pounds of avoirdupois, which are so variable, depending in a large measure on the amount of fat, not muscle, which a horse carries. Such measurements as $8\frac{1}{2}$ or 9 inches of bone in the fore cannons and a heart girth exceeding 6 feet are points worth keeping in mind when

examining this class of horses. It is so easy to make a difference of 100 or 200 pounds in the weight of an animal by excessive feeding.

Height.—The height of the hunter horse is variable. It must be in proportion to his width and especially his depth of body. From the side view a good hunter should not appear in the least "leggy." The majority of the best weight-carrying hunters range from 15 to 15.3 hands high. It takes a massively-built horse to raise the standard to the height of 16 hands and be justly termed a well-proportioned animal. In fact, some of the most desirable hunters are under 15 hands in height; still, the preference is for the horse so built in all of his parts that he will look right at 15.2 hands in height. Such an animal generally possesses a more graceful and stylish appearance. The above description applies to the heavy-weight hunter horse only. With some modification, however, it will apply fairly well to the medium-weight and light-weight hunters also. The two latter classes differ only from the former class, in that they have not sufficient size and endurance to carry heavy-weight riders. The most noticeable points of difference are to be observed in the depth of body and heart girth, muscling of back and loin, and strength of fore and hind legs. The knees and hocks will not be so large, the cannons smaller, and the forearms and gaskins smaller and not so well muscled. It is simply a difference in those points which indicates ability to carry weight and endure severe work. The lighter weights, as a general rule, possess more quality and show better breeding, so far as the blood of the Thoroughbred is concerned. In fact, they are usually smaller because they are more highly bred, having one, two, or three more crosses of the Thoroughbred sire in them. Aside from this the same general type holds good in all classes.

NOTE.—The photographs used in this connection are all of horses which won in their respective classes in 1903 and 1904 at the Royal Dublin Society Horse Show, which is held annually in the city of Dublin, and is noted the world over as being the most important show of hunter horses held in any country. The entries numbered more than 1,000 in both 1903 and 1904, and, coming from all parts of the country, the first-prize winners and champions are justly entitled to be classed as the very highest types of hunter horses to be found in Ireland.

METHODS PRACTICED IN PRODUCING HUNTER HORSES.

Notwithstanding the fact that the Irish farmers have been engaged, more or less, in the production of hunter horses for centuries, up to the present time there has been little or no united effort on the part of these people to adopt uniformity in their methods of breeding. These have been largely guesswork with the majority engaged in the business. When one method failed some other was resorted to for a short time, and then a return to the old way again. This is largely due to the fact that in the earlier days of hunter-horse production the Thoroughbred sire was almost exclusively used on the mares of the country. In many instances excellent results followed this method, and thus many people were led to believe that it was the one way to produce such a horse. For this purpose large numbers of Thoroughbred sires were imported into Ireland. The real cause of the trouble which has so often led to disappointment of

breeders seems to be rooted in the fact that the Thoroughbred horse of recent years, as a class, is very different from the Thoroughbred of a century ago. The breeders of this class of horses during the last hundred years have devoted their attention almost solely to increased speed, which was too often obtained at the sacrifice of other essential points, such as size and substance. Thus the majority of Thoroughbred sires of the present day are lacking in some of the most essential points which constitute a high-class hunter horse. Most fortunate for the hunter-horse business, there is still a small percentage of useful Thoroughbred sires which, when mated with the proper type of mare, will produce the very highest type of hunter horse. Then, too, there is another change that has been going on for almost a century. It is the gradual disappearance of the "Old Irish mare," which was so well suited to the Thoroughbred sire. She has been replaced by half-bred, three-quarter bred, seven-eighth bred, and often by mares with more of the Thoroughbred blood in their veins. These mares, as a result of their breeding, are much finer in bone and more deficient in point of substance than the mares formerly used. When this trouble appeared in the stock, various methods were resorted to with the hope of improvement. It often happened that the use of the Thoroughbred sire was abandoned, and a high-grade, called a "hunter" sire, or perhaps an "agricultural sire," was used. With the hope of furnishing some information which might be helpful, many of the of furnishing some information which might be helpful, many of the various methods will be discussed. Some of these have no other commendable feature than that they illustrate an example of a method not advisable to follow in the production of hunter horses.

THOROUGHbred SIRE AND IRISH MARE.

The use of the Thoroughbred sire on the Irish mare was the original method employed by Irish farmers in the beginning of hunter-horse production in the country. From early photographs and paintings, as well as from brief descriptions by early writers, we are led to believe that the Irish mare belonged to a class of horses highly prized for general utility. These horses were used for all kinds of work on the farm and on the road. Their origin has been traced to the Spanish horse. They are described as being medium-sized, deep-bodied, clean-legged animals, capable of withstanding an unusual amount of hardship. When bred to a good strong Thoroughbred sire, the offspring, as a general rule, developed into useful animals, many of which made excellent heavy-weight hunters.

At the present time, scattered throughout the various parts of the country, are to be found many mares of a similar type. They are generally the progeny of the so-called "agricultural sire" and dams with a mixture of draft and Thoroughbred blood. Mares of this class

which have good strong legs, plenty of width and depth of body, and considerable quality, when crossed with a Thoroughbred sire which possesses plenty of bone and muscle, good depth of body, a strong back and loin, and good quality, are very highly prized for the production of high-class hunter horses. The greatest objection to this class of dams is that oftentimes, especially if there is much draft blood in the near ancestry, the progeny, while possessing the desired conformation, will lack endurance. Such hunters are designated as having too much "soft blood" or "cold blood" in their ancestry and do not wear well. Providing such dams have sufficient "warm blood" to insure good staying powers, they constitute the most highly favored foundation stock for the production of high-class, heavy-weight hunters from Thoroughbred sires.

THOROUGHbred SIRE AND DRAFT MARE.

With the hope of producing a good hunter horse, many farmers have resorted to the use of the Thoroughbred sire and a grade draft mare. The mare may be a half-bred or three-quarter bred Clydesdale, Shire, or Suffolk. The results of this method have been, as a rule, very unsatisfactory. In the majority of instances the progeny, instead of being a happy medium between the sire and the dam in point of conformation, have had head and limbs resembling one parent and a body like the other. Such a cross was too violent to insure uniform results. Furthermore, the progeny produced in this manner, when they possessed the desired conformation, were seriously lacking, as a rule, from the standpoint of endurance. While the sire has been bred for generations from racing stock, the dam, on the contrary, has been bred from a class of horses intended to convey heavy loads at a pace seldom faster than a walk. The people generally who have practiced such methods of breeding had previously met disappointment from the use of an undersized Thoroughbred sire on half-bred or three-quarter bred mares. The result of the latter method was so deficient in point of size that they were oftentimes led to believe, for a while at least, that size was the chief requisite of a good hunter.

THOROUGHbred SIRE AND CONNEMARA PONY DAM.

In certain localities in the western part of Ireland, where the soil is poor and vegetation sparse, the people use ponies to do what little farm work is required. Different districts have different types, each of which is known by the name of the county or district in which it is most largely used. The most popular class of these ponies is called the "Connemara," which is found in the district of that name and to some extent in Mayo. These ponies might quite properly be classed as small horses, as they are about 14 hands high on an average, and

seldom more than 14.2. They have wide, deep bodies, excellent feet and legs, and show every indication of possessing unusual strength and hardiness. They are descended from Arab, or Barb, blood and are very fleet-footed. Another commendable feature is that, as a class, they are remarkably free from unsoundness. With the hope of producing a more remunerative selling animal, Thoroughbred sires have often been used on the Connemara pony mares. When good strong sires were used the progeny proved useful animals, and in this manner some of the most hardy heavy-weight hunters have been produced. It was very difficult with this system of breeding to secure sufficient size; many of the offspring were small enough for polo ponies.

Hunting men claim that horses bred in this manner were very hardy. However, this method can not be recommended as reliable in the production of hunters, but it may be fairly successful to produce polo ponies.

THOROUGHBRED SIRE AND HALF-BRED MARE.

With the continuous use of Thoroughbred sires, the half-bred mare sooner or later will have to be used as a dam. While good strong half-bred mares have been largely used and many of the best heavy-weight hunters are produced in this way, much trouble has been encountered by the farmers in producing desirable stock. A great many of the half-bred mares are far from being suitable for this work. The most prevalent fault is their lack of size and substance. Many of these animals possessed fairly good bodies, but were very deficient when it came to the bone and muscle of their limbs. A deficient heart girth was also a common weakness. Those having sufficient size were too often coarse-boned, cold-blooded animals, and thus undesirable. The really useful half-bred mare was usually the result of a good strong Thoroughbred sire and the Irish agricultural type of mare. When bred in this manner the progeny usually possessed good size, fair quality, and considerable endurance. Such a type of mare when bred to a good, large Thoroughbred sire generally produced useful stock. The offspring as a rule possessed the desirable points of conformation which are demanded in the hunter, but hardly enough quality to meet the demands of the critical trade. The Irish farmers have too often used undersized Thoroughbred sires on this class of mares, the result being an undersized, plain-looking animal. When the small half-bred mare was bred to an undersized Thoroughbred sire, the majority of the progeny were just "weeds." It is by this general system of breeding that a large number of the cab horses are produced. They are the misfits, which too often are in the large majority and are not suitable for hunter purposes, and thus are sold at comparatively low prices to the hack and cab drivers.

THOROUGHBRED SIRE AND THREE-QUARTER BRED MARE.

Where good judgment has been observed in selecting useful half-bred mares and mating them with the very best type of Thoroughbred sires the female progeny have furnished one of the most valuable types of dams for the production of high-class hunters. When mated with the proper type of Thoroughbred sire—one that has ample heart girth and plenty of bone and muscle—the very highest type of hunter has been produced. It was in this manner that Moyglass, Gold Dust, and Lord Prosperous were produced. While many of the very best hunters have been produced in this manner, yet fully one-half of the farmers who have pursued this method have met with disappointment. These failures can be attributed to two common causes at least, namely, undersized dams and second-rate or third-rate sires. The results of such mating are noticeable on every hand in all parts of the country. They demonstrate, in an unmistakable manner, that there is a limit to which this grading work can be successfully carried on by the masses of the people. While the careful breeders, men who both breed and feed well, can get good results, the average man too often gets misfits as his reward. Many good breeders advocate this method. It may do for the careful man, but it is dangerous when practiced by the masses. Ireland can furnish ample evidence that such is the case, and her people are beginning to realize the need of a better method.

THOROUGHBRED SIRE AND SEVEN-EIGHTH BRED MARES.

In some sections of Ireland the seven-eighth bred or even higher-bred mares are used. It is possible to produce heavy-weight hunters by such breeding. In fact, those breeders who are very anxious for speed and high quality in the offspring quite often adopt this plan. It must not be inferred that high breeding is objectionable; far from it. The higher the breeding, the better the progeny, providing, of course, that size of bone, depth of body, and other essential points are retained. But it is right here where the trouble makes itself known. The Thoroughbred horse, as a class, is much too light in bone and general conformation to carry a heavy-weight rider over all kinds of soil and obstacles, such as are encountered in the hunts. This being true, we can readily appreciate the difficulties to be met with in the production of hunter horses when we approach very closely the pure Thoroughbred blood. While an occasional heavy-weight hunter of unusual quality and breedy appearance is produced in this manner, it must be regarded as one of the three or four prizes out of the hundred attempts, the remainder being blanks so far as this type of horse is concerned. It is largely a game of

chance when practiced by the masses, but when undertaken by a careful breeder much more satisfactory results may be obtained. This method furnishes a considerable number of medium weights and a still greater number of light-weight animals. On account of the higher breeding, resulting in better quality of the progeny, the better class of the misfits, from a hunter standpoint, find a very good market as light-weight riding horses. This is an important consideration, as in any line of breeding there is always likely to be some that will not measure up to the standard, and thus a fairly good market for the misfits is quite a consolation for the unfortunate breeder.

AGRICULTURAL SIRE AND HIGH-GRADE THOROUGHBRED MARE.

Many farmers have resorted to the use of the agricultural sire on high-grade mares. This has been done for the purpose of securing size in the offspring from these three-quarter bred and seven-eighth bred mares, which are often seriously wanting in size and general conformation. These agricultural sires, as a class, resemble somewhat the light draft type of horses. They are clean-legged, deep-bodied horses of medium height, being around 16 or 16.2 hands, and weighing from 1,250 to 1,400 pounds in fair flesh. Their breeding is of a variable nature, as no two of them are exactly alike in this respect. From the most reliable sources of information, the writer was led to believe that, as a rule, they contain a mixture of the blood of the draft horse, the Thoroughbred, and some of the old Irish breed of horses. While occasionally a desirable hunter has been produced by this method of breeding, the major portion of the progeny are much below the standard. The cross evidently was too violent to insure uniformity in the offspring, even if the parents were good. Such sires, on account of their mixed breeding, have generally shown a decided lack of prepotency. The horses bred in this manner are not well balanced from the standpoint of conformation, and are usually seriously wanting in quality and endurance. The misfits are not in very great demand, except at low prices, to be used as hack animals. Some animals of this breeding are selected for army remount purposes, but the progeny of the Thoroughbred sire and ordinary mares, and especially half-bred mares, are very much preferable for this purpose. The prizes resulting from such breeding are too few and the misfits too undesirable to warrant the adoption of the use of the agricultural sire on mares of the class mentioned.

HALF-BRED, OR HUNTER, SIRE AND IRISH MARE.

More than one-fifth of all the stallions in service in Ireland belong to a class called "half-breds" or "hunter" sires. The term "half-bred," as applied to this class of horses, is misleading, as it is doubtful

if there are any real half-bred horses used as sires. The name "half-bred" has been and is still applied to any sire which has some other blood than that of the Thoroughbred horse in his ancestry. Many of these so-called half-breds have five, six, or even more crosses of the Thoroughbred sire, thus containing little other than the blood of the Thoroughbred. They differ from the general run of Thoroughbred sires in that they are larger, stronger-boned, deeper-bodied, and more heavily muscled animals. While many of them show remarkable quality as a class, they are inferior to the Thoroughbred in this respect. As sires of useful hunters, they stand in very high favor with the majority of the farmers, but are more or less discredited by the breeders of Thoroughbred horses. It is not reasonable to expect such sires to possess prepotency in the same degree as would be present in a horse bred for generations in one line. These half-bred or hunter sires, when used upon the so-called Irish mares, have given general satisfaction. A large percentage of the offspring have developed into useful animals for hunting purposes. As a rule they do not possess quite so much quality as those sired by a Thoroughbred horse, but their conformation is so desirable that the average class of buyers considers them good enough for the general trade. In this system of breeding, quality is one of the points which must be observed closely, as it always adds to the appearance of the animals, and thus enhances the value considerably for the critical trade.

HALF-BRED, OR HUNTER, SIRE AND HALF-BRED MARE.

This method of breeding has been followed by many farmers with more or less success. In this system success in a large measure seems to be dependent upon the ancestry of the dam. If the dam has been a half-bred out of the Irish mare the results are usually quite satisfactory. When the dam contains considerable draft blood the progeny are not so good. While they generally possess size they are not well balanced in conformation and are usually seriously lacking in endurance and quality. While some good horses have been produced in this manner the results, as a whole, have not been very satisfactory, especially when the dams contained much draft blood in the near ancestry.

HALF-BRED OR HUNTER SIRE AND THREE-QUARTER BRED OR SEVEN-EIGHTH BRED MARE.

The use of the half-bred or hunter sire on three-quarter bred, seven-eighth bred, or higher bred mares is quite a common practice and is each year becoming more and more popular with the Irish farmers. It is on this method of breeding that the more progressive horsemen rely for the maintenance and future development of the hunter horse in Ireland. Many excellent hunters have been produced in

this manner, especially when good mares have been used, and the percentage of useful animals has been as high, if not higher, than from any other method practiced. One of the most gratifying features of this system of breeding is that it affords the farmers a means by which they can continue breeding hunters from the same foundation.

In addition to the numerous methods which have been mentioned others are practiced in a small way in the attempts to produce high-class hunter horses. The Hackney sire has been used to some extent on the various classes of mares. While a few useful-appearing hunters have been produced in this way, the method is not favored by the majority of horsemen. They claim that animals of such breeding, while attractive to the eye, are very "soft" when subjected to a test, which is the only reliable method of determining a horse's right to be classed as a model hunter. These methods have not been presented for the purpose of commending them to those who are aiming to engage in the production of this class of horses. They are given for the purpose of exemplifying the most common methods that have been and are still practiced throughout the various sections of Ireland. While some of them are objectionable in many respects, still they may be the necessary choice and not the most preferable one on the part of those who have adopted them. This line of work, like the majority of others, is often carried on under circumstances which are anything but favorable.

THE MOST RELIABLE METHODS FOR PRODUCING HUNTER HORSES.

For years the Irish farmers have resorted more or less to the indiscriminate use of the Thoroughbred sire. Those who were fortunate enough to secure the use of large Thoroughbred sires were generally successful in their work; but those who used undersized sires of this breed met with disappointment. Taking the Thoroughbred sires as a class, they have not been very successful. Sooner or later farmers who used such sires were forced either to abandon the business or else to get a new stock of brood mares, as their own mares, produced in the manner described, became too small to warrant their further use. It has been a costly but valuable lesson. The use of the large sire and the small mare or the small sire and the large mare has not been successful. It has proven to be largely a game of chance, so far as the production of high-class animals is concerned. The progeny seldom were of the desired happy-medium type. Too often they resembled one parent in one particular and the other in some other point and were unevenly balanced, which rendered them worthless as hunters. Furthermore, such work had no definite purpose so far as the future development and maintenance of the type was con-

cerned. After long years of experience the more progressive breeders are beginning to recognize the importance of affinity in type in both sire and dam to accomplish successful results; that uniform results could only be obtained and perpetuated when the sire and dam were of the same or almost the same type. Thus in the production of hunter horses it was necessary to breed from sires and dams which themselves possessed the conformation and substance demanded in the hunter horse. When breeding was carried on in this manner the progeny, when well fed and cared for, usually developed into high-class animals, fit to become hunters or to produce them. This much settled, the next step was to secure suitable sires and dams for breeding purposes.

SELECTION OF SIRES.

As to the sire there are but two sources from which the desired type has been obtained. One is the selected Thoroughbred, with abundance of strength, substance, and action. Such horses, unfortunately, are very rare, and great difficulty has been met in obtaining the proper type in any reasonable number. The other is the half-bred, or hunter, sire. These horses could be used for producing hunters, but the fact that they carry crosses of cold blood has operated against them to a certain extent, even if the bar sinister is far back in the pedigree. Except the Irish section in the Hunters' Improvement Society Studbook, there has been no means of registering such horses until the department of agriculture of Ireland began its work along this line. Most of the promising young stallions of this class have been castrated, as geldings bring as good or better prices than if they had been kept entire. With systematic registration of Irish hunters things would very likely be different, as then many of the desirable types of animals which have been previously gelded would be retained as stallions. Thus such recognition, in the opinion of many prominent breeders, would be of great benefit to the farmers of Ireland, as then there would be a sufficient supply of useful sires to meet the demand on all sides. The service fees of such sires would be within the reach of the small farmers. High-class Thoroughbred sires have been so rare that the fees for the use of the few which exist are very high and the small farmer does not feel warranted in paying them. In selecting a sire for the production of hunter horses the following points should be observed:

All the desirable qualities of the hunter, mentioned on pages 196-199, should be considered, and the standard should, indeed, be higher. The possession of certain characteristics is of so much more importance that they are mentioned at considerable length. In height and weight the standard of the heavy-weight hunter should be approached.

Popular opinion favors a medium-sized horse, rather low set than otherwise, with an abundance of bone and substance. A 16.1 horse will be used if he is not leggy or weedy. In weight, the best sires range from 1,200 to 1,300 pounds in good breeding condition.

Soundness is the most essential thing to be considered in a hunter sire. No animal should be selected for breeding hunter horses that is in any manner unsound or shows the slightest predisposition to unsoundness of any nature. The progeny of no other class of sire is subjected to such severe tests as that of the hunter. In the chase every joint of the horse is taxed to its utmost, and the breathing organs could not be subjected to a more severe trial. Unsoundness, in some of its various forms, has cost the farmers of Ireland many millions of dollars through the rejection of what otherwise appeared to be useful animals for hunting purposes.

After soundness, one of the most valuable features in a hunter sire is the power to get progeny with ample stamina and endurance. While there is but one sure method of determining his ability in this direction, and that is a test of his progeny in a chase, there are several points of conformation which are considered to be indicative of such power in the sire himself. Chest capacity, or heart girth, is one of the most essential points. While this will vary somewhat, according to the condition of the horse, yet the girth should be from 6 feet 3 inches to 6 feet 8 inches. The muscling of all parts of the body and limbs is another important point. In all parts the muscles should be hard and well developed, and especially over the loin and on the forearms and gaskins, as these portions are subjected to hard work. The size and quality of the bone in the cannons is another point which must not be overlooked. Good-sized cannons in front should measure from 8½ to 9 inches below the knee. These are rough measurements worth keeping in mind at all times.

Quality is also highly important. It not only indicates the wearing capacity of the horse, but adds to his money value by improving his appearance.

In addition to these points, the horse should have the marks of masculinity which indicate the good breeder.

SELECTION OF BROOD MARES.

The selection of the brood mare is an important question, but one which can not be controlled to the same extent as in the case of the sire. While sires are, or at least always should be, selected for a definite purpose, brood mares, as a rule, vary much in accordance with the nature of the farm work and the class of horses previously bred in the district. Thus there always has been and likely will be wide difference in the type of dam used, especially until the desired

type becomes well understood and fairly well fixed. Where the right kind of sires are used and good judgment practiced in selecting the best fillies, this difficulty will become less and less noticeable in breeding operations. Under existing conditions, especially when so many types are used with more or less success, it is not possible to present a definite detailed description of what the mare must be like in conformation. Suffice it to say that the more closely she approaches the description previously given of a typical heavy-weight hunter, the more uniform and desirable will the progeny be likely to be from a hunter standpoint.

In addition, the characteristics of femininity should be strongly in evidence, especially in a sweet, refined head, a well-formed neck, with clean-cut throttle and windpipe. The mare should have as few faults as possible, because these may be perpetuated in her offspring. There should not be the slightest inclination toward unsoundness of any kind, and strong knees, hocks, cannons, fetlocks, pasterns, and well-developed feet are very essential. Depth of chest and width of body are indispensable, as without strong development in these points no mare can be expected to bring forth a strong foal. The body should be roomy, with deep, well-sprung ribs and wide, strong loins. The quarters should be wide and long, giving a roomy pelvis which insures easy parturition.

The most desirable brood mares are those having two or three crosses of Thoroughbred blood. Animals of such breeding and possessing the desirable points mentioned usually give good results when mated with a high-class hunter sire. While all the progeny thus bred do not by any means develop into desirable heavy-weight hunters, a larger percentage are satisfactory than from any other method of breeding. Those which do not meet the requirements of a hunter usually find a fairly profitable market as cavalry remounts—a class of horses which is in very strong demand in Great Britain and the Continental countries.

FACTORS WHICH HAVE BEEN DETRIMENTAL TO HUNTER-HORSE BREEDING.

Any report on hunter-horse breeding that does not make brief mention of some of the factors which have been detrimental to the business is incomplete and misleading. While Ireland has achieved an enviable reputation in the production of high-class hunter horses, it must not be inferred that no difficulties have been undergone by her people in this work. On the contrary, in certain districts, and to some extent throughout the entire country, much disappointment has been suffered. Investigations were inaugurated by the British Government and special commissions were appointed to visit the various districts for personal inspection, also to hold special sessions

at which farmers, breeders, and horse dealers who dealt in local or foreign trade were invited to be present for the purpose of giving such information as they might possess pertaining to the causes of the trouble and also suggestions for removing these causes. The farmers presented their side, the breeders or stallion owners had also a chance, while the dealers were able to give much useful information pertaining to the objections of the foreign buyers to the various classes of horses produced.

TOO MUCH THOROUGHBRED BLOOD.

In all parts of the country there is a strong feeling among the farmers that too much Thoroughbred blood has been used for the best interests of the industry; that the continued use of this has been responsible for the production of a large percentage of undersized and, in many instances, almost worthless horses. That there have been and are at the present time a great many undersized horses can not be questioned—animals that are so seriously wanting in size, constitution, bone, and muscle as to render them unprofitable to their producers. Personal observation leads the writer to venture the assertion that it has been the injudicious use of the Thoroughbred rather than too much of it that has led to such disappointing, and in some instances disastrous, results. The fact that many of the very best hunter horses have been sired by Thoroughbreds has led many people to believe that anything and everything out of a Thoroughbred sire should make a high-class hunter horse. Consequently, Thoroughbred sires have been used with little or no discrimination so far as size, constitution, and other points so necessary were concerned. The continued use of such sires on second-class and third-class mares could not prove otherwise than a disappointment. Where Thoroughbred sires of the type and conformation of those illustrated in this article have been used the results have been highly satisfactory, but the majority of the Thoroughbred sires used in Ireland are themselves too light for heavy-weight hunters. This being true, good results can not follow their use on small mares. It is but fair to say that the greatest of care in selection is very necessary in the use of Thoroughbred sires; also that the offspring of such horses require liberal feeding and good care until they reach maturity if the necessary size is to be retained.

THE USE OF UNSOUND SIRES.

One of the greatest drawbacks to hunter-horse production in Ireland has been the continued use of unsound sires. It has been a very common practice among an objectionable class of horsemen (which is far too numerous for the good of the people) to import broken-down horses which, on account of some unsoundness of conformation or

wind, have been discarded from English racing stables and breeding establishments, and to distribute them throughout the various parts of the country. Such sires have always been widely advertised as noted race horses, which, in addition to a comparatively low service fee, tempted large numbers of small farmers to select them for breeding purposes. The Irish farmers, like those of most other countries, have too often regarded a low service fee as being one of the commendable features of a sire. While the fees of many of the better sires were not within their reach, it certainly would have been a much better investment for them to have paid a liberal fee for the use of a good sire or to have given up breeding entirely rather than to use an unsound sire. It has been an expensive schooling, but many of them have been taught the valuable lesson that a sire is just as prepotent in transmitting his undesirable features as the desirable ones to his offspring. There were to be seen many examples of yearling and 2-year-old colts from such sires with large bone spavins, curbs, ring-bones, or unsoundness of wind. While sound sires are essential in the production of any class of horses, they are especially needed in the hunter horse, which in the course of his regular work is subjected to trials almost unknown to horses of any other class.

THE USE OF COLD BLOODED SIRES.

When disappointed from the use of one type or class of sires, many farmers resorted to the use of another, and perhaps the very opposite in type. When the Thoroughbred failed to get size enough in the offspring, an agricultural or grade draft sire was often used. Sometimes the Hackney or some other coach type of horses was selected. The results of such work were generally far from satisfactory. The offspring were generally badly balanced, in that they resembled one parent in one respect and the other in another. They were also seriously lacking in endurance, containing as they did too much cold blood. The introduction of one such a cross often lowered the standard of the horses of the district for many years, even after the correct type of sires was used. The real cause for this mixed breeding and introduction of miscellaneous sires was the fact that no definite type of sire and dam had been established for the production of hunter horses. Crossing was the prevailing practice. While judicious crossing gave very good results, yet the too general use of it in an indiscriminate manner proved to be disastrous. No better illustrations of the need of a well-defined type of sire and dam could be cited than those referred to in this connection.

BEST MARES SOLD TO FOREIGN COUNTRIES.

It is impossible for any country to sell annually the best of her fillies to foreign buyers and still continue to produce a large per-

centage of good horses. Those in a good position to know claim that there is a smaller percentage of useful brood mares in Ireland at the present time than there was a quarter of a century ago. This is due to the fact that foreign buyers, especially during recent years, have looked the country over for the best young mares and fillies. As a result of this demand the farmers usually retain second-rate and third-rate animals for breeding purposes, and too often those with some hereditary unsoundness. With such mares for dams nothing but the very highest type of sires could be expected to get offspring with even good average merit. The more progressive farmers and breeders are beginning to realize the importance of retaining a large proportion of their best young mares and fillies for their own use. When this method becomes more prevalent it will bring about a wonderful and much-needed change in horse production.

BREEDING FROM IMMATURE DAMS.

When the influence of the foreign demand for young mares made itself known many breeders recommended that the farmers should breed their fillies at two years old and have them rearing their first foals as 3-year-olds, so that at least one foal from each of these young mares might be secured before they left the country, as foreign buyers preferred mares 4 years old or those rising 4. While this might have been good theory, it has not proven to be a good practice. In the hands of the average farmer both the mare and the progeny were seriously injured, so far as size and proper development were concerned. The mare seldom developed sufficient size, while the progeny were always small and often badly proportioned animals. It is possible that such a method might be successful in the hands of a good feeder who would give the mare a rest the next year and feed both her and the progeny liberally on such feeds as would promote good growth.

The above-mentioned factors have been most prevalent, but no doubt others have existed which have been responsible for more or less failure on the part of farmers in this work. That any or all of these detrimental features could be eliminated can not be doubted. They are not features that belong solely to hunter-horse breeding, for similar illustrations are found, more or less, in the breeding of all classes of animals everywhere.

FACTORS WHICH HAVE BEEN BENEFICIAL TO HUNTER-HORSE BREEDING.

Recognizing the importance of the horse industry and the many natural advantages which the country had for this line of work, the Government, through its various forms of organizations, has, especially during recent years, expended large sums of money for the purpose of educating and encouraging tenant farmers in this line of

work. Few if any other countries have such work so well in hand as has Ireland at the present time. While it requires time to bring forth results in breeding operations, the influences of the work already done are making themselves known on every hand.

ROYAL DUBLIN SOCIETY.

The oldest organization which has been instrumental in this work is the Royal Dublin Society, which was organized by a few of the more progressive citizens of Dublin in 1731 and had for its object "the promotion of improvement of all kinds." While this society has been interested in all lines of work, it has been of untold value to the hunter-horse industry of Ireland. In 1868 it held its first annual horse show. This feature of its work has grown from year to year so that at the present time it is justly entitled to be classed as the greatest show of hunter and riding horses held in any part of the world. By offering liberal premiums for Thoroughbred sires, suitable to get weight-carrying hunters; for brood mares of the proper conformation and substance, calculated to produce heavy-weight hunters, and for the various classes of weight-carrying hunters, it has induced efforts by horse owners and breeders in all parts of the country to bring their best to this show. In addition, it has made its place with the people in all parts of Ireland, so that horsemen now look forward to it as the event of the year. It is so well conducted in every detail as to render it of great educational value to the people. For years farmers and breeders from all parts of the country have attended this show for the purpose of learning more about the proper type of sire or dam to use in the production of hunter horses and to study closely the conformation of the most highly approved hunter horses and the demands of the trade. These exhibitions have done much for the horse industry. In addition to this annual show, which is always held during the latter part of August, the society for many years held an early spring stallion show for the purpose of awarding premiums to the best Thoroughbred sires. These spring shows have been of great value. Coming, as they do, just before the breeding season opens, farmers are able to obtain hints that are fresh in their minds when the question of selecting a sire presents itself.

DISTRICT AND COUNTY SHOWS.

The good work of the Royal Dublin Society's shows made itself felt in another direction. While many people attended these annual shows held in Dublin, a large majority of the smaller farmers were unable to do so, therefore district and county shows were organized for the benefit of these people. The district shows brought out the best horses from the several county shows, and in a sense were grad-

ing grounds from which the better animals later on appeared at the Royal Dublin Society's show. The county shows have done much in the way of encouraging better brood mares and young stock, as these classes have always been much stronger, comparatively, than the same classes at the larger shows, while the entries of sires and finished hunters were smaller. This was due to the fact that the brood mares and young stock, in the opinion of their owners, were not highly fitted enough to make a good showing at the larger shows. Thus all the shows have been helpful to the general development of the industry. These shows have not only been of great benefit in demonstrating the most approved types of sires, dams, and young stock to interested spectators, but they have also stimulated a desire on the part of those who have exhibited to produce better animals. The county shows are aided by Government grants, upon the recommendation of the Irish department of agriculture.

WORK OF DEPARTMENT OF AGRICULTURE OF IRELAND.

The Irish department of agriculture, which was organized in 1899, has already done a most valuable work in hunter-horse improvement as well as in the various other branches of the live-stock industry. With a good staff of workers and a large sum of money at its disposal, it has already reached the people in all parts of the country. So far as the work of this department relates to improvement in hunter-horse production, it can best be presented under the five headings, namely, registration of Thoroughbred stallions, nomination of mares, premiums for Thoroughbred stallions, loans for the purchase of Thoroughbred stallions, and methods of establishing a type of hunter horse in Ireland. A discussion of these subheadings will convey a fairly good idea of the general plan of the department's effort to encourage horse breeding.

(1) *Registration of Thoroughbred stallions.*—One of the most successful and practical lines of work undertaken by the department is the scheme for the registration of Thoroughbred stallions. It was outlined and adopted for the purpose of preventing, so far as possible, the introduction of worthless sires, and as a guide to farmers in making selections of sires best suited to the needs of their mares. Animals eligible to registration must pass an inspection by experts on their general merits, and by veterinary surgeons on soundness. The inspection for general merit and fitness to get the desired type of stock is carried out by one or more inspectors appointed by the department. This includes an examination of the stallion's general conformation, of his offspring, if he has been bred, and any other points that might be deemed advisable in determining his suitability as a sire. Having satisfactorily passed the examination of the department inspector,

he is then subjected to a veterinary examination conducted by one or more veterinary surgeons appointed by the department. No stallions shall be rejected as unsound unless suffering from one of the following diseases: Cataract, roaring, whistling, ringbone, sidebone, unsound feet, spavin, and curb.

No stallion is inspected by the department officials unless he is registered in Weatherby's Stud Book, is 3 years old or over, and the owner agrees to accept for service to the horse, providing he passes inspection, not less than 20 and not more than 50 nominated mares. Furthermore, stallions accepted for registration will be registered for particular districts only, and can not, without the written consent of the department, be removed to another district. Any violation of this rule will cause the animal in question to be dropped from the list.

Any stallion owner may have his stallions inspected free of charge by filing an application with the secretary of the department of agriculture on or before the 30th day of October preceding the breeding season in which they are to be used. Applications filed at a later date must be accompanied with a fee, ranging from \$5 to \$25, in accordance with the time of year at which it is received by the department. The only exception to this rule is in the case of imported stallions which are purchased before the 31st day of March. Such horses are examined free of charge. Furthermore, intending purchasers of horses in England, after they have inspected the animals and completed all arrangements for the purchase, are granted free inspection of such sires in England by the Irish department inspectors. This has been done for the purpose of encouraging the importation of useful sires. Although this work is still new, it is highly favored by the farmers and better class of horsemen. Great care has been observed in making the selections, and high standards of excellence have been adhered to in all instances. In 1903, 123 Thoroughbred sires were awarded department certificates. This is a good showing for the third year's work. The figures for 1904 are not yet available, but when published they will show a material increase over those given above. This form of work is driving out the scrub horses and owners of such animals from the breeding business, as farmers in all parts of the country are demanding sires registered by the agricultural department. It is also a practical and most effective method of educating stallion owners to appreciate the need of good, sound sires.

(2) *Nomination of mares.*—While the registration of good, sound sires has been an excellent thing, in that it served as a guide in making selections, yet many small tenant farmers were not able to avail themselves of the use of such animals, on account of fairly high service fees. In addition to this fact, many were not able to select sires suitable to the needs of their mares. This being true, the

department has inaugurated another line of work, which has met with great success. This is the system of nomination of mares. A certain number of mares belonging to tenant farmers are selected in each county, and the owners granted nomination tickets to the value of \$10 or \$15 per mare, which can be used as credit in payment of service fees, the department reimbursing stallion owners to the extent of the value of the nomination tickets for mares bred to their horses. The owners of such mares are required to breed to stallions registered by the department. Although the nomination ticket may not be sufficient to meet the full fee of such a horse, it reduces it to such an extent as to bring it within the reach of these small farmers.

During the months of February, March, and April of each year, upon consecutive dates and at certain fixed places which have been well advertised for at least five weeks before the date of the exhibitions, one or more exhibitions of farmers' mares are held in each county for the purpose of issuing nomination tickets. All mares entered at these exhibitions must be the property of tenant farmers whose holdings come within a certain maximum allowance and who is also a resident of the county. In making the selections all mares are inspected by department experts as to conformation and suitability for such breeding and by veterinary surgeons for soundness. No mare is awarded a nomination ticket that does not come up to the standard of conformation and is also free from all hereditary forms of unsoundness. The entire number on exhibition are examined and graded in order of merit, on which basis the nomination tickets are granted. The preference is given to desirable young mares under 6 years of age. This is not done in the belief that mares of such an age are better breeders than older mares, but for the purpose of encouraging the farmers to retain their best young mares for breeding purposes. Not more than one nomination ticket is granted to one farmer, except when the desirable mares are too limited in number to fill the nomination list for the county. Exacting rules have been adopted to prevent any misuse of the tickets granted.

When awarded a nomination ticket, the farmer selects from the list of registered sires in his county his first and second choices and forwards them to the department of agriculture. In case the list of his first choice is not already full he is granted the use of it, but should that list be full he is given another choice whose list is not full. In the year 1903 there were 1,792 nomination tickets granted to farmers in the various parts of Ireland for the use of Thoroughbred sires. This work has already done a great deal of good. It has stimulated an interest in good horse breeding and a desire on the part of the small farmer to retain his best mares for breeding purposes.

(3) *Premiums for Thoroughbred stallions.*—In executing its work the department has had to encounter many difficulties. The equal

distribution of suitable sires in the various counties had to be solved. While one county had more than a sufficient number to meet the demand, some other county would not have enough to meet the needs of the people. This difficulty has been partially overcome by awarding liberal premiums, amounting to \$500 each, to stallion owners as an inducement for them to stand one of their sires which was registered by the department in some county which did not have a sufficient supply of its own. The awarding of such a premium did not alter the amount of the service fee, but served as an inducement to send the horse into a new territory. This scheme has been very helpful to many of the less progressive counties.

(4) *Loans for the purchase of Thoroughbred stallions.*—To further assist in solving the difficulty previously mentioned concerning the scarcity of desirable sires in certain counties, the department inaugurated another plan which has given good results. Under certain conditions, approved applicants (either individuals or associations) may secure loans from the department for the purchase of stallions. This is only done in those counties where there is not a sufficient number of registered sires. Before granting a loan the department must approve the animal to be purchased and the price to be paid, and the intending purchaser or association must insure the animal in question for the full amount of purchase price in some reliable live-stock insurance company and deposit the policy with the department, must pay one-third of the purchase price of the horse, and furnish suitable bonds for the remaining two-thirds, which is loaned by the department at $2\frac{1}{2}$ per cent per annum and to be paid, with interest due, in five equal annual installments. The department also reserves the right to inspect the horse at all times until he is paid for by the purchasers. Should there be any doubt in the opinion of the department as to the care and attention which the horse is having they can remove him elsewhere. This form of aid has been drawn upon by many counties and is regarded quite satisfactory.

(5) *Recognition of hunter sires and establishing hunter type of horse.*—During the present year (1904) the department has inaugurated a line of work which has for its purpose the establishment of a distinct type and eventually a breed of hunter horse. The greatest care has been exercised in outlining and executing the initial work. A careful examination of the so-called half-bred horses has been made and 12 of the best have been chosen as suitable animals for registration under the departmental regulations. A work of such importance must of necessity be carefully conducted, and to all appearances every precaution to guard the best interests of the plan is receiving the attention of those in charge.

METHODS OF FEEDING AND MANAGEMENT.

In a discussion of the methods of feeding and management of hunter horses as practiced in Ireland it must be stated at the outset that there is no such thing as uniformity of details in this work. Different people practice very different methods in their attempts to accomplish the same end, namely, the development of a good horse. Notwithstanding this fact, there are certain phases of the work common to all parts of the country. Furthermore, the fundamental principles of the methods in vogue on the most successful farms are, when compared, very much the same. In this connection a general review of the methods practiced, with special attention given to those of the more successful breeders, will be presented.

THE FEEDING AND MANAGEMENT OF THE STALLION.

The stallions, as a rule, receive considerable attention. They are well fed and generally fairly well exercised. The stable accommodations are very good, each horse having a roomy box stall which is warmly constructed, generally of stone, and well bedded. Earthen floors are the most prevalent, but in some instances cobblestone is used. On some farms exercising paddocks are connected with each stall, but the most common practice is to have an exercising lot in which each animal is allowed a certain amount of time each day. These lots are usually long and narrow rather than square. With long and narrow exercising lots there is much less danger from accidents than is the case in square lots, where the horse can run in a circle. Some horsemen, however, prefer having their stallions walked or ridden a certain distance each day. The Irish horsemen are strong advocates of plenty of fresh air for their breeding horses. They also believe in abundant exercise, claiming that it develops and hardens the muscles of their stallions, thus rendering them more useful sires of hunter horses. In some instances sires are even used in the hunts, but this practice is very rare at the present time. After the breeding season is over the rations of the horses are reduced, especially so far as the grain part is concerned. Succulent feeds, such as fodder crops, roots, and mash, are used instead of the hay rations. The mash consists of bran, crushed oats, and a small allowance of roots, all steamed and fed in the evening. For the grain part of the ration oats and bran are used. It is a rare thing to find any other grain than oats used. Sometimes barley in the steamed form is fed in small quantities, but it is not used as a regular grain feed. Corn is never fed to stallions. Horsemen claim that corn is too much of a fattening and heat-producing ration to be used as a feed for breeding animals; that when corn is used it is next to impossible to keep the blood in good condition, and that sooner or later it will cause trouble

in the legs; that even with the use of barley the greatest of care is necessary, and the animal must receive more exercise than is necessary when oats and bran are fed. For roughage long hay in moderate quantities, about 10 or 11 pounds per horse per day, is used, but many horsemen prefer good, clean, well-cured clover hay to all other kinds, as it has a favorable influence on the digestive organs. During the winter season mashes and roots are fed, but are gradually reduced as the breeding season approaches, as all horse owners are anxious to have their stallions in firm flesh—not soft and flabby—when the breeding season opens. Mashes are fed three times per week during the winter, and consist of crushed oats and bran for horses in good condition. Horses that are not in good condition usually get a small allowance of oil cake in connection with their mashes. Long hay of mixed variety is used, and the amount is reduced somewhat in quantity and more grain is fed. The grain ration consists solely of oats and bran, and from 12 to 16 pounds per day are fed, in accordance with the size, condition, and work of the horse. During the breeding season the stallion is regularly exercised and fed liberally on oats, bran, and long hay. Regular grooming is practiced at all seasons of the year. On every farm visited the owners strongly recommended liberal feeding of natural feed stuffs, such as tended to keep the system of the animal cool, regular exercise, and plenty of it, as being the essential features of the successful management of a stallion. In no instance were any of the stallion owners feeding condiments of any kind, and all considered the use of such articles as not only unnecessary, but dangerous when fed to stallions.

THE FEEDING AND MANAGEMENT OF THE BROOD MARE.

There is more diversity in the methods practiced of managing the brood mares than in the case of the stallions. This is due to the fact that on the majority of the farms the mares are required to do the most of the work. On some farms, however, the brood mares are not worked at all, but this is the exception to the general rule. Where the mares are not required to work, they are usually allowed to graze throughout the entire year, except in the case of severe storms and for a few weeks previous to and after foaling time when early foals are reared. After the foal is weaned and during the early winter months, no additional food is given except when the supply of grass is short. When the supply of grass is not sufficient, some oats or oats and bran are fed. For a short time previous to foaling time, a small allowance of oats or oats and bran is usually fed. While suckling the foal, the general practice is to give no feed except what the mare is able to gather in the pasture lot. In some instances a little crushed oats and bran are fed throughout the entire suckling period, but this practice is not common.

The mares that are used for the regular farm work, in addition to rearing foals, are handled in a very different manner. The busiest seasons of the year on the Irish farms are the spring, summer, and early fall months. With more than four-fifths of the entire country under grass we can understand that the tilling of the soil is not a very heavy task. Furthermore, the nature of the soil is such as to render the work very light, and thus there is less heavy farm work than is usual where the land is more difficult of cultivation. These conditions are all very favorable from the standpoint of working the brood mare. The amount of work usually demanded of such an animal is not much more than good exercise.

During the fall and winter months, after the foal has been weaned, these mares are grazed the greater part of the time, especially when not at regular work. Even when worked, it is the custom to allow them the run of a grass lot at night. In addition they are fed liberally on oats—sometimes bran and oats. As the foaling time approaches they are given very good care and are liberally fed on good mixed or clover hay, morning and evening, with oats and bran for the grain ration. When not at work and the weather conditions are favorable, they are allowed the run of a grass lot during the day, as in this way they get regular exercise and sufficient grass to keep them in good health. This method of treatment, with more or less light work, is practiced up to foaling time. They are then furnished a roomy box stall and are given about a week's rest before being put to work again. During the suckling season the mares are well fed on crushed oats and bran. In some instances the foals are allowed to run with the mothers while at work, while others prefer keeping the foals confined during the day and allowing them to run with the mothers on a grass lot during the night. Excellent results have been obtained by this system of regular work and liberal feeding. Under the existing conditions in Ireland it has much to commend its general use. In this manner the brood mares, in addition to doing the regular farm work, rear, on an average, about two foals every three years, which is very helpful to these small farmers. Both the dams and the progeny appear to be in good condition, and from what could be learned colts produced in this manner developed into as useful horses as those from idle mares.

THE FEEDING AND MANAGEMENT OF THE FOAL.

One of the most vital points to be observed in the successful production of hunter horses is the proper care and nourishment of the foal. While good breeding is indispensable, good feeding and management are of equal importance, as the size and conformation of the horses are more or less determined by the proper and continuous nourishment of the animal while young. This is especially true

since the general tendency for horses of this class is to be undersized; thus every effort should be made to promote regular, uniform growth from the date of birth until maturity. All successful breeders strongly emphasized this point, and stated that in their observations poor feeding of young animals, especially after weaning time, had been the cause of much disappointment on the part of small farmers in their efforts to produce useful hunter horses.

The best farmers and breeders practice the grain feeding of foals, in addition to the mother's milk, from the time the foal is about three weeks old. Personal observation leads the writer to believe that the best horses are started in this manner. It has not been found a difficult task to teach the foal to eat some finely crushed oats and bran, especially in the case of those foals whose dams are regularly worked. At the beginning but very little of such feed is given. As the foal grows older and becomes larger the amount is gradually increased until at 4 months old from 3 to 4 pounds are fed daily, in accordance with the condition of the colt and the amount of milk furnished by the dam. This grain ration, in addition to the mother's milk, produces a strong, well-developed, vigorous foal, which, when weaned from its mother at 5½ or 6 months old, grows right along without any setback. After weaning, the foal is fed its regular allowance of grain and, in addition, has the run of a grass lot during the day and a comfortable, well-bedded box stall with some good hay to eat during the night. This method is practiced during the more favorable fall months.

Special attention is given to the wintering of foals. Shelter and warmth are regarded as being fully as important as good feeding. Allowing foals to run out all winter is regarded as being a fatal error, as it usually causes the foal to get a setback from which it seldom recovers. While abundance of fresh air and out-of-door exercise are given during favorable weather, yet comfortably bedded, warm box stalls are highly recommended for night use and during unfavorable weather. The winter rations consist of a liberal allowance of good mixed hay for roughage and crushed oats and bran for the grain ration. Some of the most successful horse producers feed a small allowance of oil cake in connection with the crushed oats and bran. Sometimes foals which are not thriving well are fed a mash of cooked turnips, bran, and crushed oats about twice a week.

THE FEEDING AND MANAGEMENT OF COLTS AFTER THEIR FIRST WINTER.

The summering of yearlings that have been well wintered is not a difficult task. The common practice is to allow them a good run on grass, with plenty of fresh water at all times. Nothing additional is given, as the grass alone not only produces good growth of bone and muscle, but also maintains a good condition of flesh. Few countries

are so fortunate as Ireland from the standpoint of grass production. A moist climate insures a good supply at all times, but of more importance still, from a horse-producing standpoint, is the quality of the grass produced from the limestone subsoil. This grass is rich in mineral matter, and thus young horses grown upon this soil are noted for the size and quality of their bone. Such natural conditions are very beneficial in the development of young horses. The methods employed in the wintering of yearlings are similar to those in the case of foals, the principal difference being that yearlings can stand more exposure and thus remain out of doors more. In this manner they are grazed a considerable portion of the time, especially during favorable weather. For roughage the usual feed is mixed hay, but clean clover hay is fed on many farms. The grain ration consists almost solely of oats; in some instances bran is also given. Animals that do well receive no other feed, but those that are thin receive mashes about twice per week and sometimes oil cake, the main object being to keep them growing well and on the cheapest ration possible, as foodstuffs are usually scarce.

The summer and winter management of 2-year-old colts is very simple. During the summer months they are grazed on good grass and furnished plenty of pure water. This system of grazing is practiced throughout the major portion of the winter season, especially when the weather is at all favorable and the grass supply sufficient. At other times mixed hay and straw are fed, but grain of any kind is seldom given, except to thin colts. Thus, as 2-year-olds they are given but little care and very little feed aside from what they gather themselves. When they arrive at the age of 3 years more care and attention are demanded if retained on the farm. At this age, however, a great many farmers dispose of their colts to dealers and farmers who make a business of training them for sale. This is especially true in the fall of the year when the colts are $3\frac{1}{2}$ years old. There is always a considerable foreign demand for such animals. From this time on they must be better fed, as more or less training must be done. It is very important that these young animals should be well halter broken, used to the bit, saddle, and other such things. When this training does not commence at 3 years of age or even before, much difficulty is usually encountered in accomplishing it. It often happens that an otherwise good horse is ruined from a hunter standpoint by being allowed to run too long before an attempt is made to train him. No horse can be classed as a desirable hunter that is not well broken.

DEVELOPMENT AND EDUCATION OF HUNTERS.

Good manners and good disposition are most essential features in this class of horses. They are of the first importance when it comes

to the selection of a horse for this kind of work. The man in a chase has no time to spend on educating his horse to pass obstacles. While much time is usually required to educate a horse properly, yet there is little or no uniformity of method pursued in this work. Each man has his own ideas as to the best manner of accomplishing this end. This is usually done by the boys and young men. On those farms where boys are scarce the colts are usually sold at 3 or 3½ years of age. There are always plenty of buyers for such animals. The training consists of teaching the animal the use of the bit and saddle at first. When this is accomplished the animal must be taught to jump fences, ditches, and to pass obstacles of all kinds. Other points, such as getting them accustomed to hounds, is accomplished in many ways. The principal points are those mentioned, namely, the free use of the bit and the saddle and the jumping of all kinds of obstacles that are usually encountered in the course of a hunt. While a horse is not considered sufficiently mature to withstand the hardships of hunting until he is 5 years old, many are purchased and used for some light work in their 4-year-old form. This is due to the difficulty which hunting men find in securing desirable horses of a more mature age, and thus they are compelled to purchase the younger animals and partially grow them for their own use.

The Irish farmers, breeders, and especially horse dealers fully understand fitting and preparing their horses for sale purposes. Nothing is left undone, either in the line of grooming or feeding, which will enhance the value of an animal. They are offered in the pink of condition. The attractive skin, with its coat of silky hair, is usually the result of judicious feeding of steamed mash of oats, barley, bran, and oil meal, in addition to the regular hay-and-oat ration. Hand rubbing of all parts of the body also plays an important part in securing the desired end. The tails are always squared, manes pulled, and legs neatly clipped.

SOURCES OF DEMAND FOR HORSES OF HUNTER TYPE.

The Irish people are fortunate in having a ready market for all surplus horses. Those of the highest type are purchased for hunting, while animals bred along the same lines but deficient in size or quality are used for other demands at smaller prices. By this system of breeding some half a dozen or more classes of horses are produced for which there is a foreign demand at very good prices. They might be divided as follows: Weight-carrying hunters (heavy, medium, and light), mares and fillies for breeding purposes, saddle horses, officers' remounts, troopers' remounts, harness horses, and hack, or cab, horses.

WEIGHT-CARRYING HUNTERS.

The most valuable and also the most difficult class of horse to produce is the weight-carrying hunter. This class is divided into three subclasses according to their size and substance, and thus their ability to carry weights. While there is a strong demand for all three of these classes at substantial prices, the highest prices are always secured for those animals belonging to the heavy-weight class. Good heavy-weight hunters with lots of quality and good manners command from \$800 to \$2,500. Such animals must be thoroughly broken, "good lookers," "fast goers," and "long stayers." Young horses from 3 to 4 years old, possessing the conformation and quality desired in this class of animal, sell for from \$400 to \$600 in their green state.

Thus such horses prove profitable investments to both the producer and the trainer. Medium and light weight hunters, when well trained, command from \$500 to \$1,500, depending upon their substance, quality, and manners. Young horses of the type, quality, and conformation necessary to make good medium and light weight hunters sell in their green state for prices ranging from \$200 to \$500. While some of these horses are used by hunting men in Ireland, the majority go to England, Scotland, and Continental countries.

MARES AND FILLIES FOR BREEDING PURPOSES.

Good young mares and fillies of the desired type, conformation, and quality demanded in the weight-carrying hunter horse are in strong demand for breeding purposes. While many countries purchase some of these animals, Germany affords the best market. This is due to the fact that the German Government is very desirous of having a strong military remount system and, so far as possible, to produce all their horses within their own country. Thus, instead of annually importing animals for military purposes, they are importing female stock to be used by their own people in producing useful home-grown horses. German buyers pay regular visits to the Irish horse shows and fairs for the purpose of selecting the best young mares from 3 to 6 years of age. Mares of the proper age command from \$500 to \$1,000 each, in accordance with the amount of quality, substance, and size which they possess.

SADDLE HORSES.

There has always been a very good home and foreign demand for saddle, or riding, horses. Such horses must show quality, fair size, good style, nice disposition, and good manners. For this class of animals there is a strong demand at fairly remunerative prices. The prices are certainly good, since the animals are really misfits in the breeding of hunter horses. Such animals command from \$175 to \$500 each. The highest prices are usually obtained for well-

trained horses showing nice style and action and suitable for ladies. Such animals in their green state command from \$150 upward.

ARMY REMOUNTS.

There is a regular and growing demand for army remount horses. This includes the demands of the British army and those of practically all the European countries. The best demand comes from several of the European countries, which pay the highest prices. Prices for horses of this kind are, to a certain extent, fixed, and those countries with the highest limits are always in a position to get the best animals. Two grades of horses are demanded for this purpose. The best class are the horses used by army officers. Such animals must possess fair size, good conformation, fair quality, and considerable speed. Horses which do not show enough breeding for hunters are often sold as officers' remounts. The prices vary in different countries and range from \$200 to \$315. They are purchased when 4 years old, do not require special training, and can be bought directly from the breeders. The second class, that of trooper remounts, are animals of fair size and strength. The more Thoroughbred blood they contain the better, but usually they are the result of mating a Thoroughbred sire and a grade draft mare or an agricultural sire and a high-grade Thoroughbred mare. Such animals usually sell at \$140 to about \$195 when 4 years old. Many farmers find them fairly profitable animals to produce. Such horses could certainly be produced to better advantage in a range country.

HARNESS HORSES.

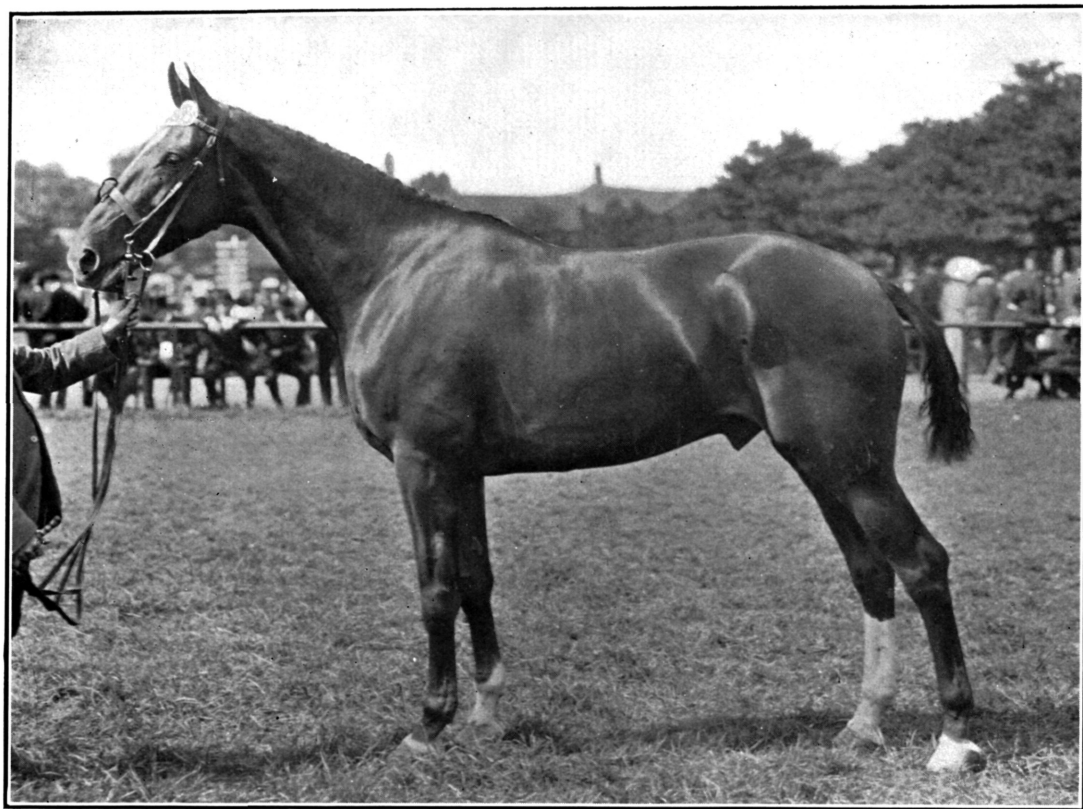
In the production of hunter horses there is always a fair percentage which make useful harness animals. This class includes those which are too rangy for hunter purposes. From a harness-horse standpoint they show remarkable quality and finish, good style, fair action, and wonderful endurance. Compared with horses of coach breeding, the hunter-bred horses are generally lacking in that high knee and hock action which is so much sought for by many horse fanciers. On the other hand, they possess a long, easy stride, which renders covering long-distance journeys an easy task. Their value in the harness-horse market varies much in accordance with the demand. Where high-actioned horses are wanted, hunter-bred horses, as a rule, sell at comparatively low prices, but when free, easy, and graceful drivers are wanted they sell at premium prices. The general range of prices will vary from \$200 to \$1,000 each, according to the breeding and quality of the horses and the market demands.

CAB AND HACK HORSES.

This includes the misfits and blemished or unsound animals. The prices are low and vary in accordance with the supply and demand.

DESCRIPTION OF PLATE 8.

This illustration represents Moyglass, winner of first prize in a class of over 70 heavy-weight hunters, the hunters' champion cup for the horse best suited for a hunter (competition open to all classes), and the Coote challenge cup for the best weight-carrying hunter, mature or immature, in all the heavy-weight classes at the Royal Dublin Society's show in 1904. He is a chestnut, 5 years old, and was sired by a Thoroughbred. Somewhat more substance all through would improve him, but from the standpoint of quality and finish, few if any better heavy-weight hunters have been exhibited in many years.



HEAVY-WEIGHT HUNTER GELDING MOYGLASS.

DESCRIPTION OF PLATE 9.

FIG. 1.—This illustration represents Gold Dust, who won first prize in an unusually large and strong class of medium-weight hunters and the hunters' champion cup at the Royal Dublin Society's show in 1903. He was a horse of great substance in all parts, of medium height, and very good quality.

FIG. 2.—Bonny Morn, winner of first prize in a class of more than 100 entries for medium-weight hunters and Samuel Ussher Roberts's challenge cup for hunters bred in Ireland at the Royal Dublin Society's show in 1904. This is a handsome chestnut horse, with plenty of substance and quality to warrant him a place in the best of medium-weight hunters.

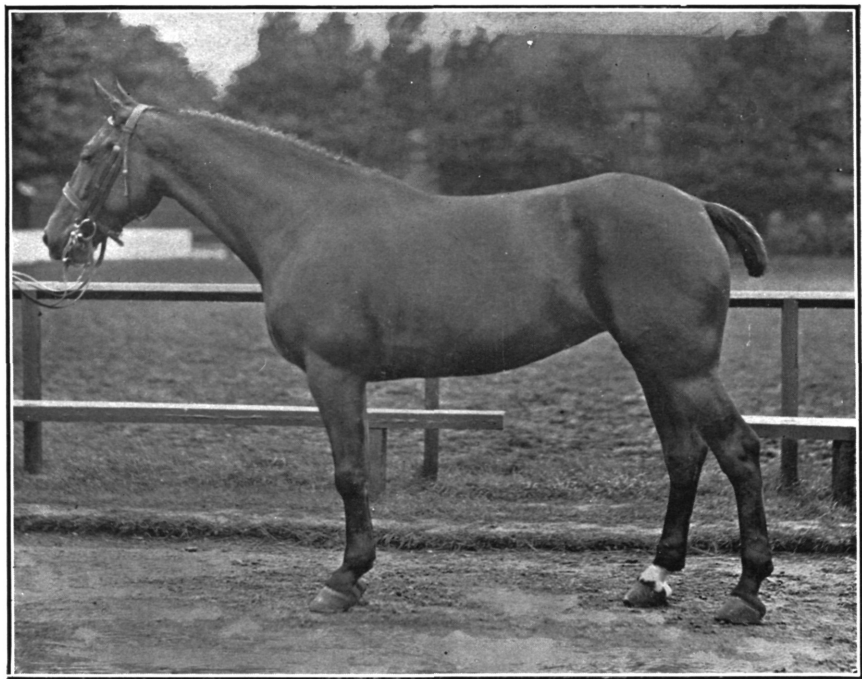


FIG. 1.—MEDIUM-WEIGHT HUNTER GELDING GOLD DUST.



FIG. 2.—MEDIUM-WEIGHT HUNTER GELDING BONNY MORN.

DESCRIPTION OF PLATE 10.

FIG. 1.—This illustration represents Speck, the first-prize winner in a class for young horses suitable to become medium-weight hunters at the Royal Dublin Society's show in 1903. She is pronounced by good judges as being an exceptionally strong medium-weight mare, having ample substance to carry her weight.

FIG. 2.—This illustration represents the promising 4-year-old gelding Lord Prosperous, winner of first prize in a strong class of young horses suitable for heavy-weight hunters, also reserve to Moyglass for the Coote challenge cup at the Royal Dublin Society's show in 1904. He is an exceptionally good young horse in most respects and has wonderful quality.



FIG. 1.—MEDIUM-WEIGHT HUNTER MARE SPECK.



FIG. 2.—FOUR-YEAR-OLD HEAVY-WEIGHT HUNTER GELDING LORD PROSPEROUS.

DESCRIPTION OF PLATE 11.

FIG. 1.—This is a very good illustration of General Peace, winner of first prize in the class of Thoroughbred stallions suitable to get weight-carrying hunters, and the Croker challenge cup for the best stallion of any age at the Royal Dublin Society's show in 1904. He is a most attractive looking 10-year-old brown horse, and has won a great many valuable races in his day. He girths well, has muscular back and quarters, stands on short legs, has almost 9 inches of bone below the knee, unusual quality throughout, and is considered by good judges to be the right stamp of a horse to breed weight-carrying hunters. It is but fair to say that while this horse has the desirable qualities of a high-class hunter sire, he has never been used for this purpose. His unusual breeding, individual excellence, and his success on the race course have won for him such a strong admiration among the breeders of race horses that his service fees are not within the reach of the average farmer. He is allowed but 40 mares per year, at a fee of \$250 per mare.

FIG. 2.—This is a good likeness of Royal Mask, winner of first prize in the class for Thoroughbred stallions suitable to get weight-carrying hunters, and the Croker challenge cup at the Royal Dublin Society's show in 1903, and winner of second prize at the same show in 1904, when he was beaten by General Peace. This horse is a chestnut in color, and possesses wonderful substance. He is a typical hunter sire. Few horses show stronger development of bone and muscle in all parts. In point of quality and finish he is surpassed by General Peace. Royal Mask, while used chiefly as a sire of Thoroughbred stock, has sired many good hunters. If his fees were within the reach of all classes of farmers, few horses would be in more popular demand.

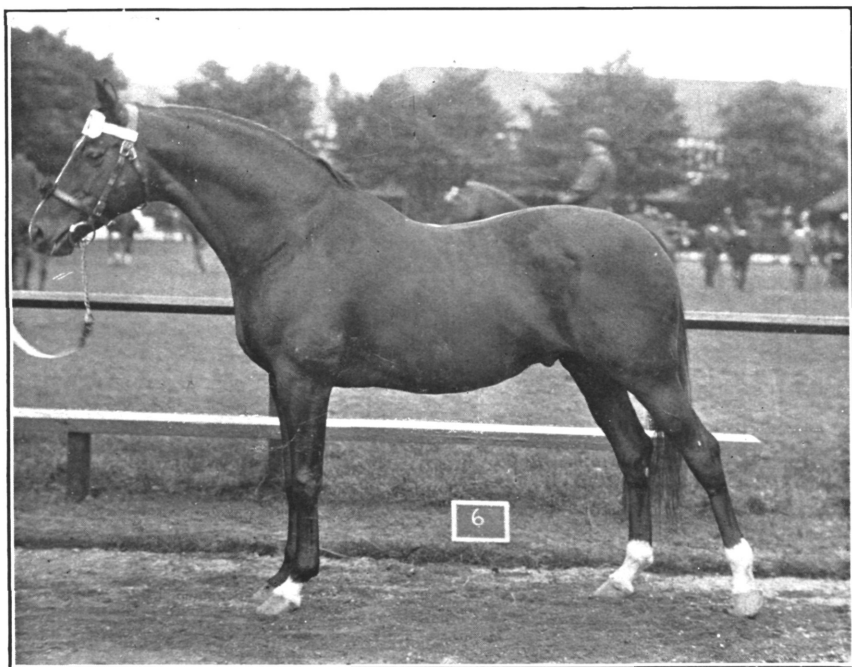


FIG. 1.—THOROUGHbred STALLION GENERAL PEACE

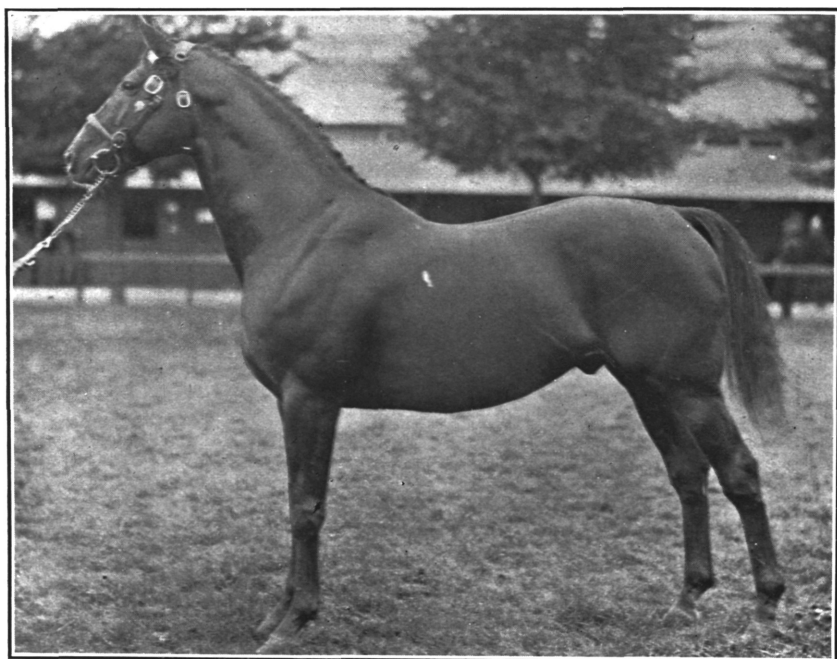


FIG. 2.—THOROUGHbred STALLION ROYAL MASK.

DESCRIPTION OF PLATE 12.

FIG. 1.—This is a fairly good representation of Red Prince II, who won first prize in a strong class of Thoroughbred stallions suitable to get weight-carrying hunters, and the Croker challenge cup at the Royal Dublin Society's show in 1902, and was second in class to Royal Mask at the same show in 1903. Few if any other sires of hunter horses are more highly appreciated by horsemen than Red Prince II. While used in his owner's stud as a Thoroughbred sire, he is also used freely as a sire of hunter stock. His wonderful depth of body and strength of back and loin are seldom equaled in a sire of Thoroughbred blood. He has ample bone and is unusually well muscled in both fore and hind legs. He has also very good quality for a horse of his age. Being in his teens and having done hard service, his knees are a bit "over" now. Barring this defect, it is doubtful if he has an equal, in point of conformation, in all Ireland.

FIG. 2.—This is an excellent likeness of the famous hunter stallion Merry Matchmaker, winner of several first prizes and gold medals at the leading English shows. He is registered in the Hunter Improvement Society Stud Book of England, which was organized for the purpose of developing and establishing a hunter breed of horses. This horse was sired by a Thoroughbred stallion and out of a mare whose racing performances, soundness, and conformation were sufficient to warrant her registry in the Hunter Improvement Society Stud Book. Merry Matchmaker is a perfect model of what a high-class hunter sire should be. He possesses the style, quality, size, and substance that are so necessary in the make-up of a typical hunter horse. In point of heart girth and bone and muscling of the legs he has few equals. He is an excellent type to keep in mind when selecting a hunter sire.

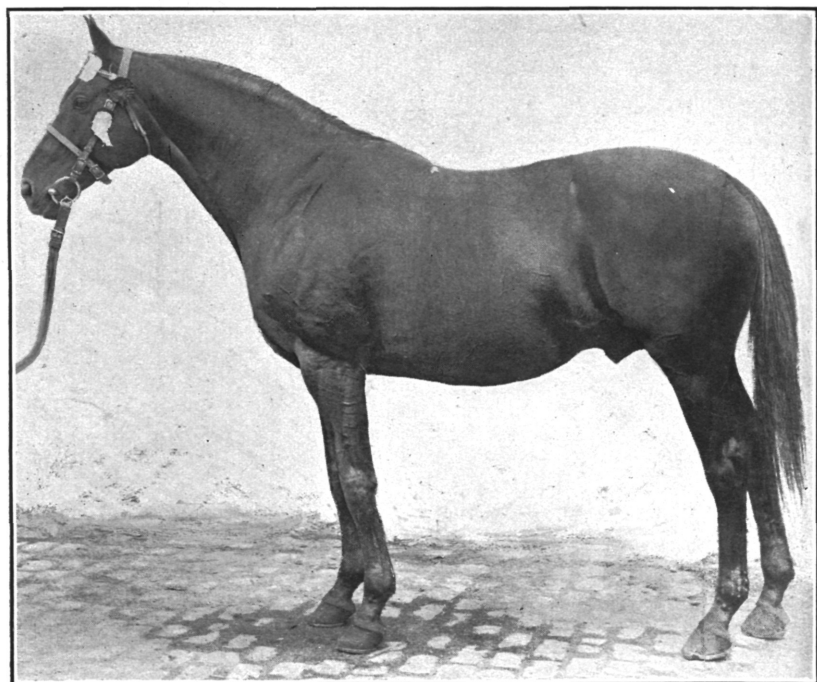


FIG. 1.—THOROUGHbred STALLION RED PRINCE II.

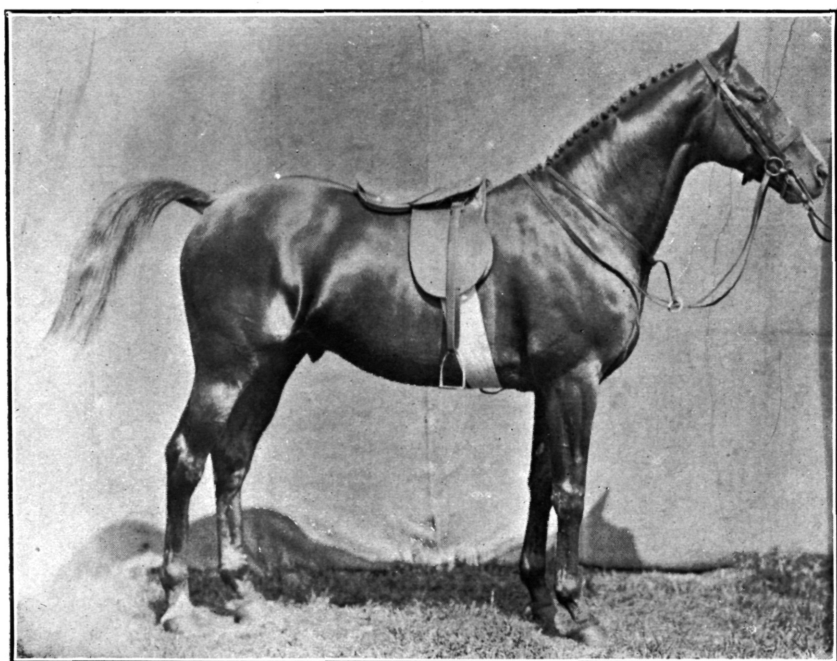


FIG. 2.—ENGLISH-BRED HUNTER STALLION MERRY MATCHMAKER.

DESCRIPTION OF PLATE 13.

FIG. 1.—This is a fairly good likeness of the Irish-bred hunter stallion Ballymena, a famous prize winner at the leading Irish and English shows. He is also registered in the Hunter Improvement Society Stud Book of England. He was sired by a Thoroughbred stallion and out of a weight-carrying hunter mare. His dam was twice a winner at the Belfast show in a class open to mares up to 210 pounds' weight. This illustration does not do him justice, as one of his front legs is shown badly placed. He is a good, strong horse in all his parts, especially in the bone and muscling of his legs. In point of quality and depth of body he is not the equal of Merry Matchmaker.

FIG. 2.—This is an excellent illustration of the famous prize-winning mare Grey Pullet. She has on several occasions headed the class of mares suitable to produce weight-carrying hunters, and also won challenge cups at the Royal Dublin Society's show. She is especially strong in her depth and width of body and in strength of bone and muscle in fore and hind legs. Her progeny have been unusually good from a heavy-weight hunter standpoint. Taking her as a whole, she is of a type that commends itself to all horsemen as being an excellent utility animal. From what could be learned of her breeding she is the result of two Thoroughbred crosses on the Irish mare, thus making her a three-quarter bred. Many reliable breeders were free to class her as being the best type of a hunter dam in the country.

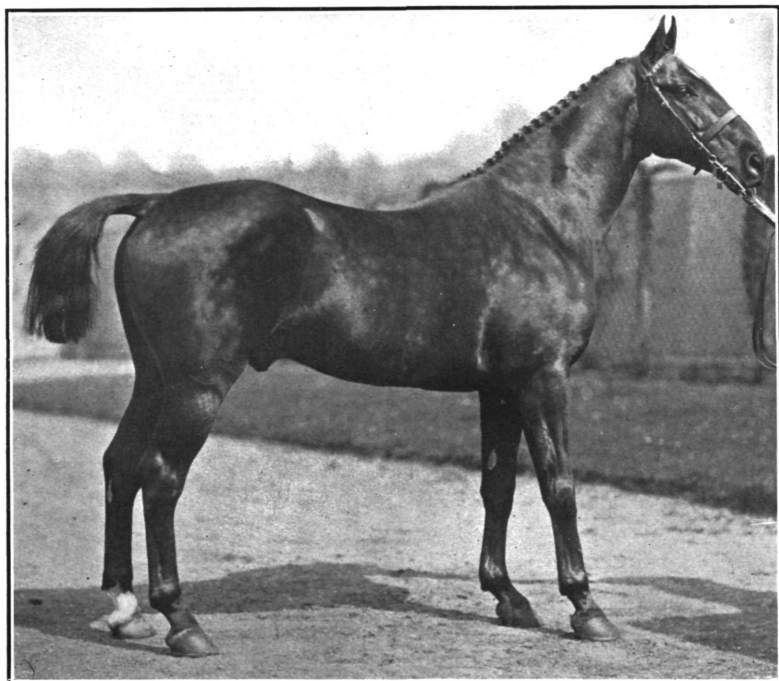


FIG. 1.—IRISH-BRED HUNTER STALLION BALLYMENA.

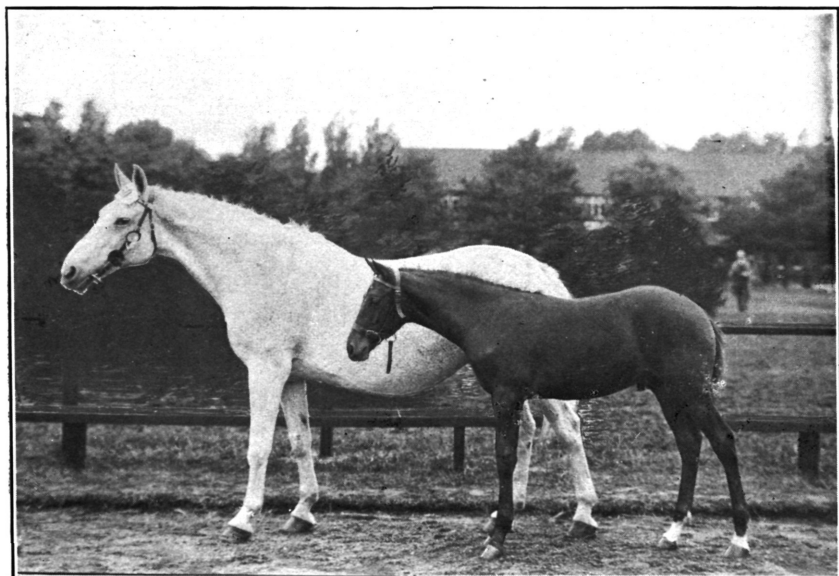


FIG. 2.—HUNTER BROOD MARE GREY PULLET.

DESCRIPTION OF PLATE 14.

FIG. 1.—This is a very good likeness of Royal Blood, winner of second premium in the class of mares over 6 years old suitable to produce weight-carrying hunters, at the Royal Dublin Society's show in 1904. She is a mare of quality and finish, but somewhat lacking in support beneath the knees. Aside from this, she could not be severely criticised. She is an excellent producer, as her foal headed his class at the same show in keen competition. When mated with the right kind of a sire she is a most useful mare; but compared with Grey Pullet she does not possess the substance, as indicated by heart girth and the bone and muscle development of the limbs.

FIG. 2.—This represents Maid of Orleans, winner of first prize in the class for mares 6 years old and under calculated to produce weight-carrying hunters, at the Royal Dublin Society's show in 1904. This useful young mare is but 4 years old, and her filly foal, which is her first, won highest honors in her class. Maid of Orleans is a well-bred mare, shows good quality, and is considered to have fair bone and muscle for her age. While a good animal, she does not class with either of the aged mares when uniformity of conformation is considered.

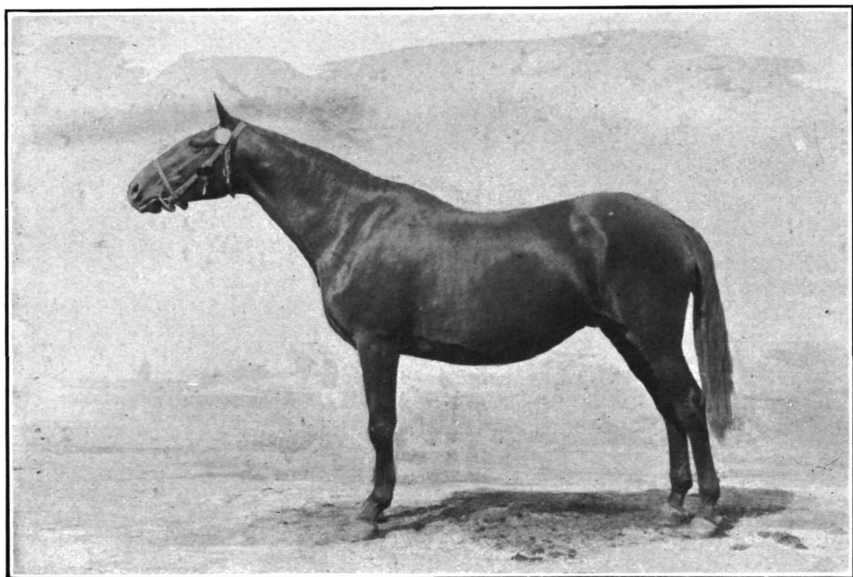


FIG. 1.—HUNTER MARE ROYAL BLOOD.



FIG. 2.—FOUR-YEAR-OLD HUNTER MARE MAID OF ORLEANS.

DESCRIPTION OF PLATE 15.

FIG. 1.—This illustrates Lady Tacitus, winner of first prize in a good class of mares 6 years old and under, possessing hunter conformation and bred to a Thoroughbred sire, at the Royal Dublin Society's show in 1904. She is a handsome bay 4-year-old, with black points. From the standpoint of conformation, quality, and endurance she measures up well. She is a three-quarter bred.

FIG. 2.—This is an excellent likeness of the 3-year-old filly Star of Ross, winner of the Pembroke cup for the young hunters bred in Ireland, at the Royal Dublin Society's show in 1904. This young three-quarter bred, in point of body conformation and bone and muscling of legs, shows a development rarely equaled. In the estimation of competent judges, her equal has not been produced in years in Ireland. At the recent show she was strongly admired by foreign buyers, and offers of an almost incredible size were refused, as her owner desired to keep her in Ireland. She is of the right type and affords an excellent model for study.



FIG. 1.—FOUR-YEAR-OLD HUNTER MARE LADY TACITUS.

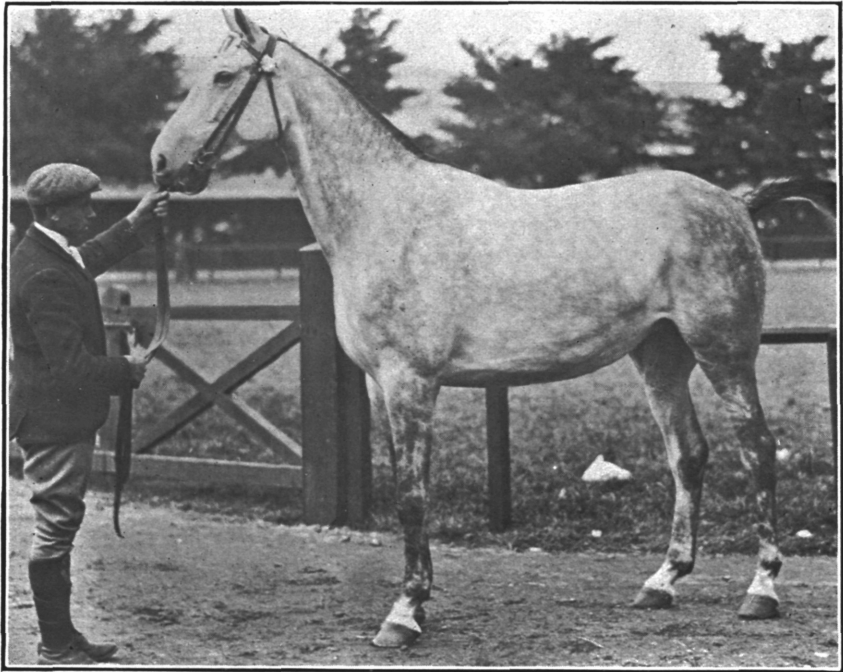


FIG. 2.—THREE-YEAR-OLD HUNTER FILLY STAR OF ROSS.